ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF PAGES 6

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER: 01 Jul 2009	2. CONTRACT NO. *(if any)*: QA133005CQ1035
3. ORDER NO.: 0042	4. REQUISITION/REFERENCE NO.: NWWG9502-09-20276

5. ISSUING OFFICE *Address correspondence to:* WG950201
NATIONAL DATA BUOY CENTER
BUILDING 1007
STENNIS SPACE CENTER, MS 39529

KURT C.WEILBAECHER 228-688-2825

6. SHIP TO: WG953023
a. NAME OF CONSIGNEE: NATIONAL DATA BUOY CENTER NDBC
b. STREET ADDRESS: RESOURCES BRANCH /W/OPS63 BUILDING 1100
2009 AUG 20 A 6:14
c. CITY: STENNIS SPACE CENTER | d. STATE: SSC MS | e. ZIP CODE: 39529-6000
f. SHIP VIA

7. TO: 00004157 TIN: 953630868
a. NAME OF CONTRACTOR: SCIENCE APPLICATIONS DUNS: 148095086
b. COMPANY NAME
c. STREET ADDRESS: 10260 CAMPUS POINT DRIVE MAIL STOP G2
d.CITY SAN DIEGO | e. STATE CA | f. ZIP 921211578

8. TYPE OF ORDER
[ ] a. PURCHASE
REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.
[X] b. DELIVERY
Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9. ACCOUNTING AND APPROPRIATION BOC: OBLIGATED AMT: $585,306.52
See Attached Schedule

10. REQUISITIONING OFFICE: NOAA - NWS

11. BUSINESS CLASSIFICATION *(Check appropriate box(es))*
[ ] a. Small [X] b. Other than small [ ] c. Disadvantaged [ ] d. Women-owned [ ] e. HUBZone [ ] f. Emerging small business [ ] g. Service-disabled veteran-owned

12. F.O.B. POINT	14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE	16. DISCOUNT TERMS
DESTINATION		30 Jun 2010	00.00% 0 Days Net 30

13. PLACE OF

a. INSPECTION	b. ACCEPTANCE

17. SCHEDULE *(See reverse for Rejections)*

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QTY ACCEPT. (g)

18. SHIPPING POINT	19. GROSS SHIPPING WEIGHT	20. INVOICE NO.	17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:			
a. NAME: NATIONAL DATA BUOY CENTER			
b. STREET ADDRESS *(or P.O. Box)*: BUILDING 1007		US$	17(I) GRAND TOTAL
c. CITY: STENNIS SPACE CENTER	d. STATE: MS	e. ZIP CODE: 39529	585,306.52

SEE BILLING INSTRUCTIONS ON REVERSE

22. UNITED STATES OF AMERICA BY *(Signature)*: Kurt C Weilbaecher

23. NAME *(Typed)*: KURT C.WEILBAECHER 228-688-2825
(TITLE CONTRACTING/ORDERING OFFICER)

OPTIONAL FORM 347 (REV. 4/2006)
Prescribed by GSA/FAR 48 CFR 53.213(f)

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO. (if any)	ORDER NO.
01 Jul 2009	QA133005CQ1035	0042

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QTY ACCEPT. (g)
	Base Period: 07/01/09 - 06/30/2010					
0001	ASOS PI LABOR (min fee) FFP FUNDED THROUGH 06/30/2010 Accounting and Appropriation Data: 14.09.F2MS8A8.P00.0082.040301001.200600 0095020000.25130000.000000 $ 11,765.34 14.09.4BM8LNY.PMH.0006.040202001.2006 000095020000.25130000.000000 $ 14,157.86 14.09.E2MS6A6.P00.0084.040301017.200600 0095020000.25130000.000000 $ 31,045.06 14.09.G8M5JR6.PCX.0089.040401012.200600 0092020000.25130000.000000 $ 50,200.82 14.09.4BM9LNY.PMH.0006.040202001.2006 000095020000.25130000.000000 $ 66,250.00 14.09.4BM8LZZ.PMH.0006.040202001.20060 00095020000.25130000.000000 $ 119,500.55 14.09.G2MS8A8.PMH.0088.040301001.20060 00095020000.25130000.000000 $ 244,744.89	1	JB	537,664.52	537,664.52	
0002	ODCs (inclusive of fee) CPFF FUNDED THROUGH 06/30/2010 Accounting and Appropriation Data: 14.09.G2MS8A8.PMH.0088.040301001.20060 00095020000.25130000.000000 $ 31,000.00	1	JB	31,000.00	31,000.00	

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QTY ACCEPT. (g)
0003	Labor Earned Fee (Target) FFP FUNDED THROUGH 06/30/2010 Accounting and Appropriation Data: 14.09.4BM8LNY.PMH.0006.040202001.2006 000095020000.25130000.000000 [redacted] 14.09.G2MS8A8.PMH.0088.040301001.20060 00095020000.25130000.000000 [redacted] 14.09.4BM8LYY.PMH.0006.040202001.2006 000095020000.25130000.000000 [redacted]	1	JB	[redacted]	[redacted]	
	Option Period: 07/01/2010 - 12/31/2010					
0004	ASOS PI LABOR (min fee) FFP	0	EA	0.00	0.00	
0005	ODCs (inclusive of fee)	0	EA	0.00	0.00	
0006	CPFF Labor Earned Fee (Target)	0	EA	0.00	0.00	
	FOB: Destination The Technical Management Plan (TMP), dated 07/01/2009, control #1 is hereby attached and incorporated into this Task Order General Conditions for Award: 1. The Government will receive consideration from the contractor for any vacancy that exceeds 30 days. 2. All training, travel, and other direct costs will be approved in advance by the COTR. Such approval will be					

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QTY ACCEPT. (g)

submitted with the invoice for processing.

3. Initial Training Clause:
Initial training of contractor employees will be accomplished in accordance with the terms and conditions of the task order and will be reimbursed under the ODC CLINs. However, if a vacancy occurs during the performance period of this task order and training is required for the vacated position, the contractor shall be responsible for the required training of the employee and it shall not be charged to the ODC CLINs of this task order.

The following contract clauses are herby incorporated into this task order:

52.217-8 Option to Extend Services. (Nov 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 calendar days.

52.217-9 Option to Extend the Term of the Contract. (Mar 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 calendar days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 calendar days before the contract expires. The

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO. *(if any)*	ORDER NO.
01 Jul 2009	QA133005CQ1035	0042

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QTY ACCEPT. (g)
	preliminary notice does not commit the Government to an extension. (b) If the Government exercises this option, the extended contract shall be considered to include this option clause. (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 18 months. Bonnie Barnum BONNIE BARNUM SAIC CONTRACTS MANAGER					

SAIC Science Applications International Corporation From Science to Solutions™	Document Number:	TMP- 4042
	Version Number:	1
	Issue Date:	7/1/09

Task Management Plan

Title:	Technical Support Services for the Sterling Field Support Center

THIS IS A CONTROLLED DOCUMENT

Unless issued by the TMP CM Lead with a control number noted in the blank below, any printed copies are considered uncontrolled.

The official repository for SAIC Task Management Plans is iNUN.

CONTROL NUMBER _____

ORIGINATOR:	Date Signed:
TASK ORDER MANAGER:	Date Signed:
PROGRAM MANAGER:	Date Signed:

TMP cover sheet.

TASK MANAGEMENT PLAN

CHANGE PAGE

Version No.	Purpose of Change	Pages Effected	Date of Issue	Instructions
1.0	Initial Issue (Note: This new TO-40 replaces TO-8 in its entirety)	All	7/1/09	Initial Document

TABLE OF CONTENTS

ATTACHMENTS, FIGURES AND TABLES

PERIOD OF PERFORMANCE: **BASE PERIOD: JUL 1, 2009 – SEPT 30, 2009**
OPTION 1: OCT 1, 2009 – DEC 31, 2009
OPTION 2: JAN 1, 2010 – MAR 31, 2010
OPTION 3: APR 1, 2010 – JUN 30, 2010

TO TYPE: Hybrid FFP and CPFF

1.0 Overview

The National Weather Service (NWS) Office of Operational Systems (OOS) is responsible for many fielded operational observation networks and observing systems. The Field Systems Operations Center (FSOC) is responsible for managing the Automated Surface Observing System (ASOS), the Cooperative Observer Program (COOP) Fischer Porter Rebuild kits, and the systems associated with the upper air program. The Observing Systems Branch (OSB) within FSOC is responsible for management of these programs from an operational perspective along with the Sterling Field Support Center. SAIC has many years of experience providing technical support services at the Sterling activity and over the past few years has worked with the government to shift the focus of the activity to field support work.

This work now includes supporting and testing of the surface and upper air weather observing systems, the associated sensors, control devices and accessories. As certain activities in the ASOS product improvement area have begun to spin down SAIC has and will continue to support the ASOS sustainment effort, and take a more active role in the area of field support. Thus with the commissioning of the RRS systems beginning in July, the SAIC will support the SFSC in developing a help desk function to support the Commissioned RRS systems and sites which have the Fisher and Porter Rebuild. This tasking will require some field work, observations, use and maintenance of calibration and testing equipment, and a variety of associated support work.

SAIC at the SFSC will also continue to support current and future activities of the other offices within the NWSHQ such as the Office of Science and Technology ASOS Product Improvement (ASOS PI). An example of this is the ASOS precipitation identifier testing and algorithm development.

Overall SAIC understands this work to include field support activities, testing of new surface, upper air and climatological equipment as well as ECP testing of changes to legacy systems. Additionally, this may include data continuity studies, which evaluate the impact a change has on an observing network. Tasking for these activities can come from any organization within the NWS; however, the principal customers are the Office of Operations Systems (OOS) which SFSC is

a part of, the Office of Science and Technology, the Regional Headquarters, and all Weather Service Forecast Offices (WFO).

The Government TM or his designee is responsible for initial directing of tasks and setting priorities under this Task Order. Any changes in relation to price, schedule, or performance will only be authorized by the Contracting Officer. SAIC shall be responsive to all tasks assigned to it under this Task Order.

For this contract period the contract support is divided into two FFP CLINS. CLIN 1 will be FFP SFSC Operations and CLIN 2 ASOS PI. Each CLIN will have a sub CLIN for travel, training and ODC.

The tasks outlined in this document apply to the Sterling, and Johnstown facilities, and future sites selected by the Government to support future SFSC operations. The work at future sites will be accomplished to the extent of available manpower.

SAIC recognizes that the ASOS program is a high visibility program and is the nation's primary land based surface weather observing network. It is a joint DOC/DOD/DOT project with over 1000 observing systems. The ASOS Product Improvement Program is designed to improve maintainability, measurement quality and utility, and ensure the requirements for NWS & Aviation forecasts are met.

SAIC understands that the COOP FPR technical support includes the nationwide network of sensors that record weather information for use in the climate community. The sensors record a variety of meteorological measurements including temperature, dew point temperature, and precipitation accumulation. The COOP program currently uses a Fischer and Porter (FP) rain gauge for measuring precipitation accumulation every 15 minutes. The current sensor uses a paper tape punch mechanism that is obsolete and the information it records can be hard to collect. Therefore, the significant effort with this system is to replace the tape punch mechanism with a device that will have digital data recording and reporting capabilities. Support for other surface systems requested by the TM can be supported on a limited basis.

SAIC also recognizes the importance of the country's Upper Air Observing Program consisting of over 100 observing sites. Of these, 40 are MicroART, 3 are Sippican W9000 systems, the remaining sites are Radiosonde Replacement Systems (RRS), and 10 are CHUAS stations. All of these systems are supported by SFSC. These activities include the implementation of improved upper air observing equipment including the surface observing equipment (supports upper air operations), upper air tracking systems, radiosondes, and associated data acquisition and communication systems. SAIC will support the SFSC Alaska

region in developing a plan to demonstrate the feasibility of using a hydrogen generator at select sites within the region, and prepare for conducting RRS data continuity test.

SAIC personnel have worked with the lead Technical Managers at the Office of Operations Systems (OOS) and Office of Science and Technology for many years and have a superior symbiotic relationship. We understand that tasking for this work can come from any organization within the NWS; however, the principal customers are the Office of Operations Systems and the Office of Science and Technology.

2.0 Scope

SAIC will provide technical support services for all tasks under this task order. We understand that the Government TM or his designee is responsible for the initial assignment all tasks and setting or changing priorities as long as price, schedule and/or performance are not affected. SAIC is responsible for coordinating task activities and for reporting the completion of all milestones in accordance with agreed to schedules. There will be one overall team lead for SAIC personnel at SFSC, but there are two technical leads, one for environmental science issues and one for engineering and IT work; both of these individuals need to be fully aware of tasking. SAIC will eliminate the Administrative Support position as directed by the government, with the understanding that this action will cause some increase in individual task time by all other personnel as they will need to perform the administrative work previously done by this individual. (Examples includes: Mail and FEDEX support, tracking of deliverables, travel plans and expense reports.)

To capture the day to day tasking SAIC will use the existing work request form. If SAIC has a question or concern about a particular work request we will bring it to the attention of the requestor and/or TM for discussion and resolution. Once a work request is completed, the requester and TM will be notified. Prior to a due date if it becomes apparent the due can not be met, SAIC will notify the requester and TM.

As part of the tasking, SAIC will provide algorithm development support, perform equipment maintenance on test infrastructure, perform test bed upgrades, and provide meteorological observations (surface, climate, and upper air) during significant weather events and as scheduled to meet test requirements.

We understand the Sterling Field Support Center activities also include operational support for NWS observing systems, including the deployment and initial issue of new equipment, software/firmware, and modifications. Because the exact schedules and milestone cannot be pre-determined in most cases,

SAIC will prepare approximate task plans, staff work assignments, projected schedules (MS Project) that provide best estimate for completion for each work assignment and deliver these to the government TM for approval on a weekly basis. Status reports documenting work in-progress or completed will be provided each week to the TM along with updated MS project schedules. Reports will be delineated by task and by individual and include a list of all action items as well as a list of work order created during the last week. The report will cover CLIN 1 and 2. We understand that the Government reserves the right to request re-assignment of our staff if new or higher priorities exist as long as price, schedule and/or performance are not affected. However, we believe it is highly unlikely changes such as these could be affected without modifying one of the three factors.

SAIC Site Lead shall conscientiously work to insure the staff supporting the SFSC is multi-disciplined in terms of being able to work across system types, diverse technologies, and applications. In accordance with SAIC corporate policy, each of our staff will be afforded the opportunity to work a 9 day 80 hour two week work period. SAIC will insure that an agreed upon minimal manning will always be available on workdays during "core" hours (50 percent of work force). Upon implementation of the help desk (understood to be December 2009), SAIC will arrange for individual to work shifts so as to cover the hours between 6:00AM and 10:00PM. We understand that in most circumstances, anyone assigned a help desk shift would be expected to perform their daily duties. During significant weather events SAIC understands that assigned personnel may be required to work extended hours required, including weekends. Any additional tasking/priorities that require staffing beyond the proposed staffing level and/or other events such as adverse weather beyond the amounts estimated in this proposal, shall give rise to a proposal for an equitable adjustment to the Task Order.

In execution of this task order, miscellaneous support is necessary. This support includes, but is not limited to, coordinating activities with the Government TM as appropriate, the development of test plans, test procedures and Standard Operating Procedures (SOP) for the maintenance and operation of equipment and observing practices, presentations, technical reviews, Environmental Compliance, Health and Safety; Training; Administration; Logistics; and Technical Training.

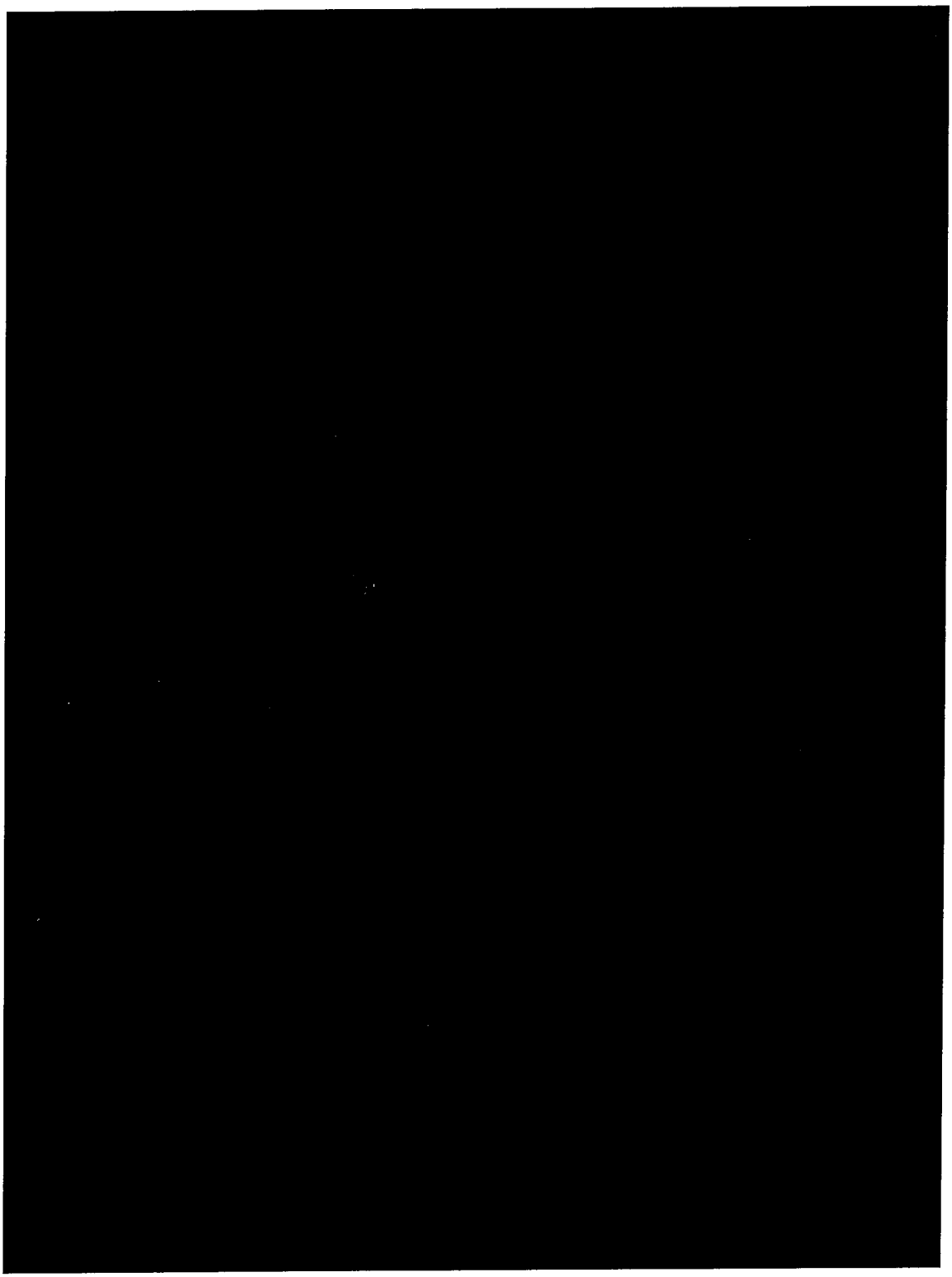
As in past years the scope of the work at Sterling continues to evolve to support requirements to the NWS mission and the Office of Operations Systems (OOS) and the Office of Science and Technology. Accordingly this Task Management Plan (TMP) outlines our overall project management structure and describes each of the SOW tasks under which we may be tasked to provide support to the NWS. We have also provided a Firm Fixed Price to accomplish what is our

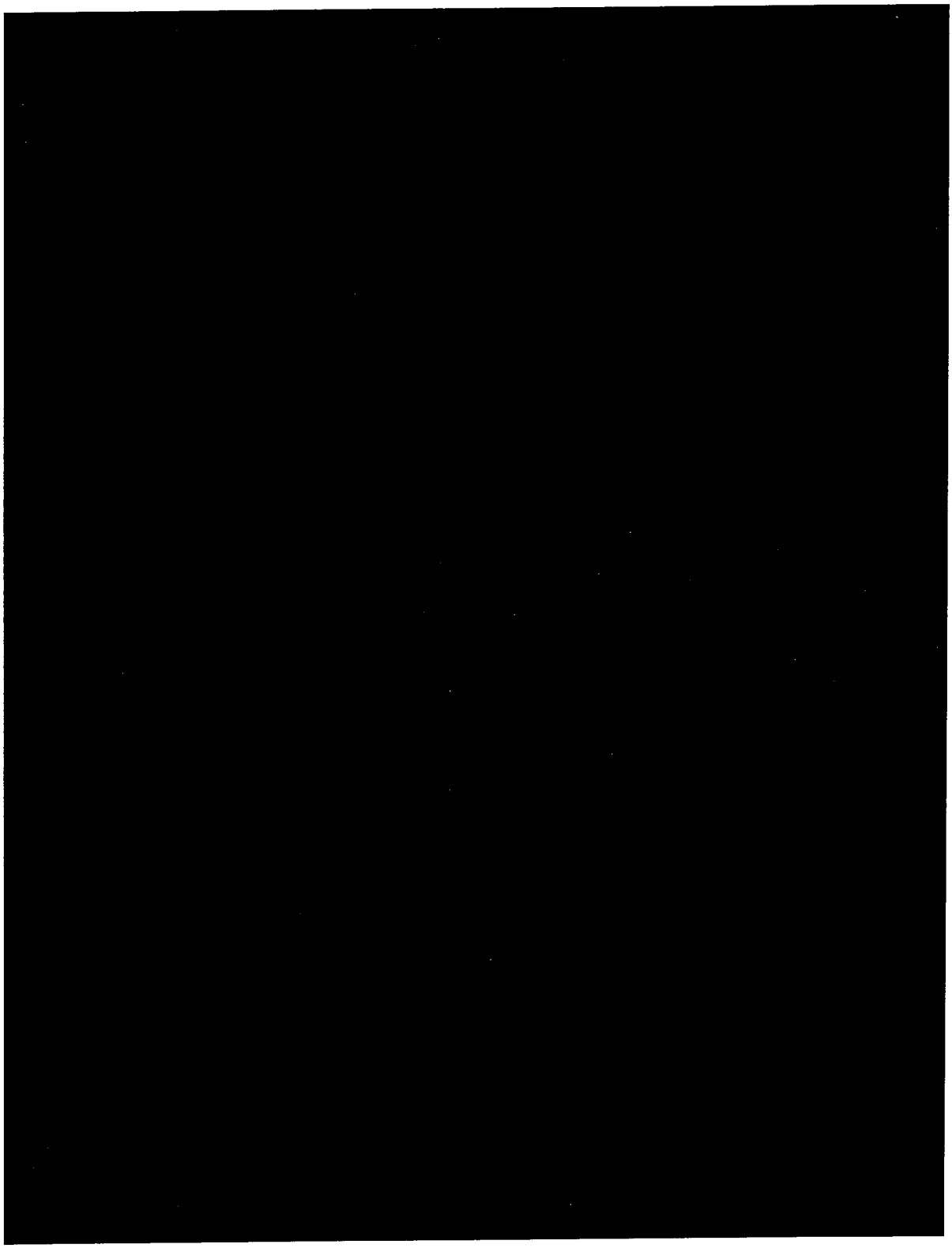
current best estimate of the actual tasking that will be undertaken during the 1 July 2009 to 30 June 2010 timeframe. In many cases the individual tasks are broadly defined.

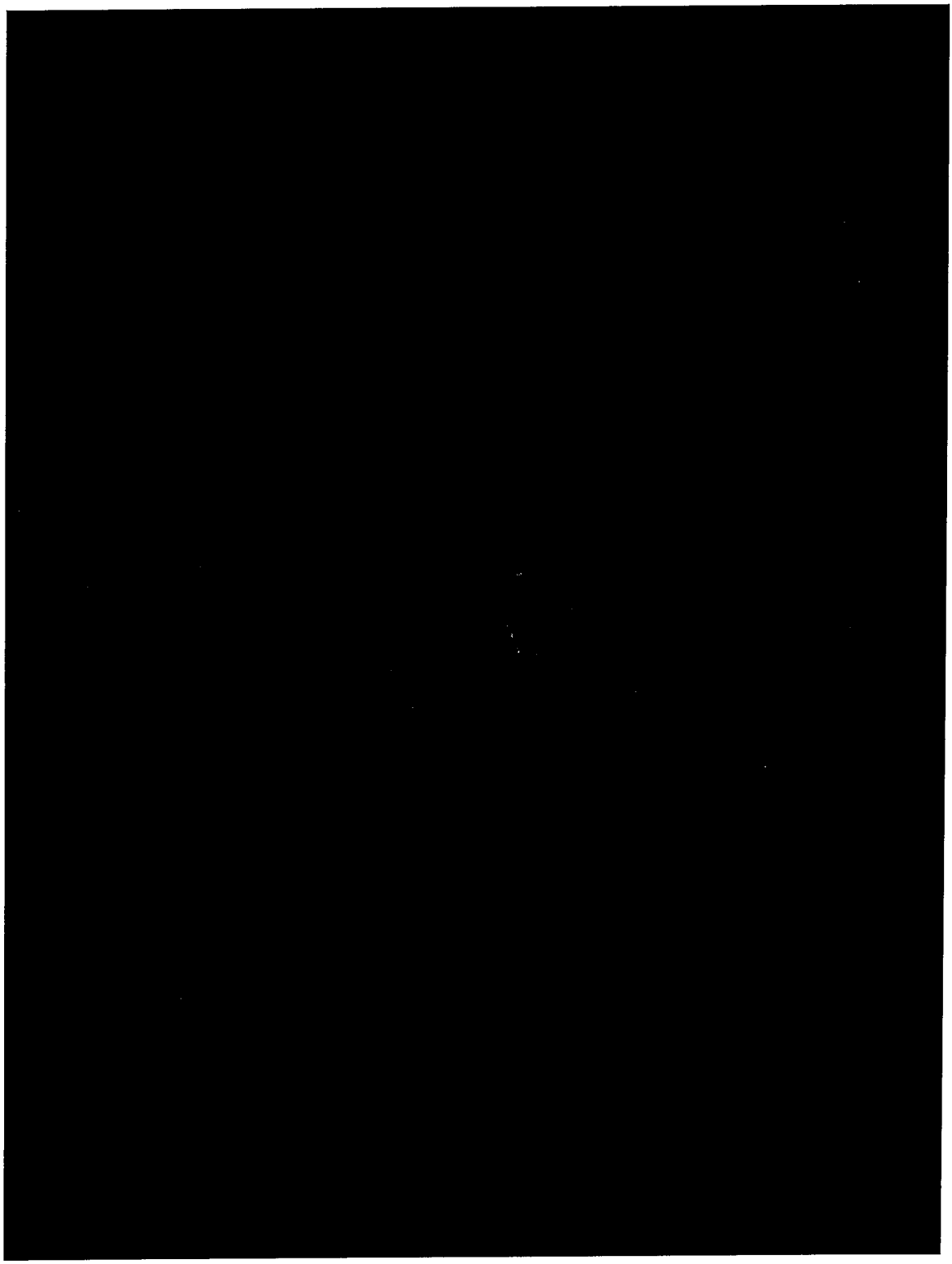
In order to complete this work, yet keep within the government's funding limitations, SAIC has placed limits on several of the tasks. As these tasks are more accurately defined, prioritized and planned, SAIC will evaluate our ability to execute Contract Year 05 mission requirements and will diligently work with the Government Technical Monitor (TM) to support tasking priorities of the NWS within our staffing capabilities. Additionally, many items accomplished as part of each task and classified as maintenance will be accomplished only as man hours are available. The SAIC Site Lead shall supervise all personnel performing the technical support. SAIC is responsible for coordinating task activities and for reporting the completion of all milestones in accordance with agreed to schedules.

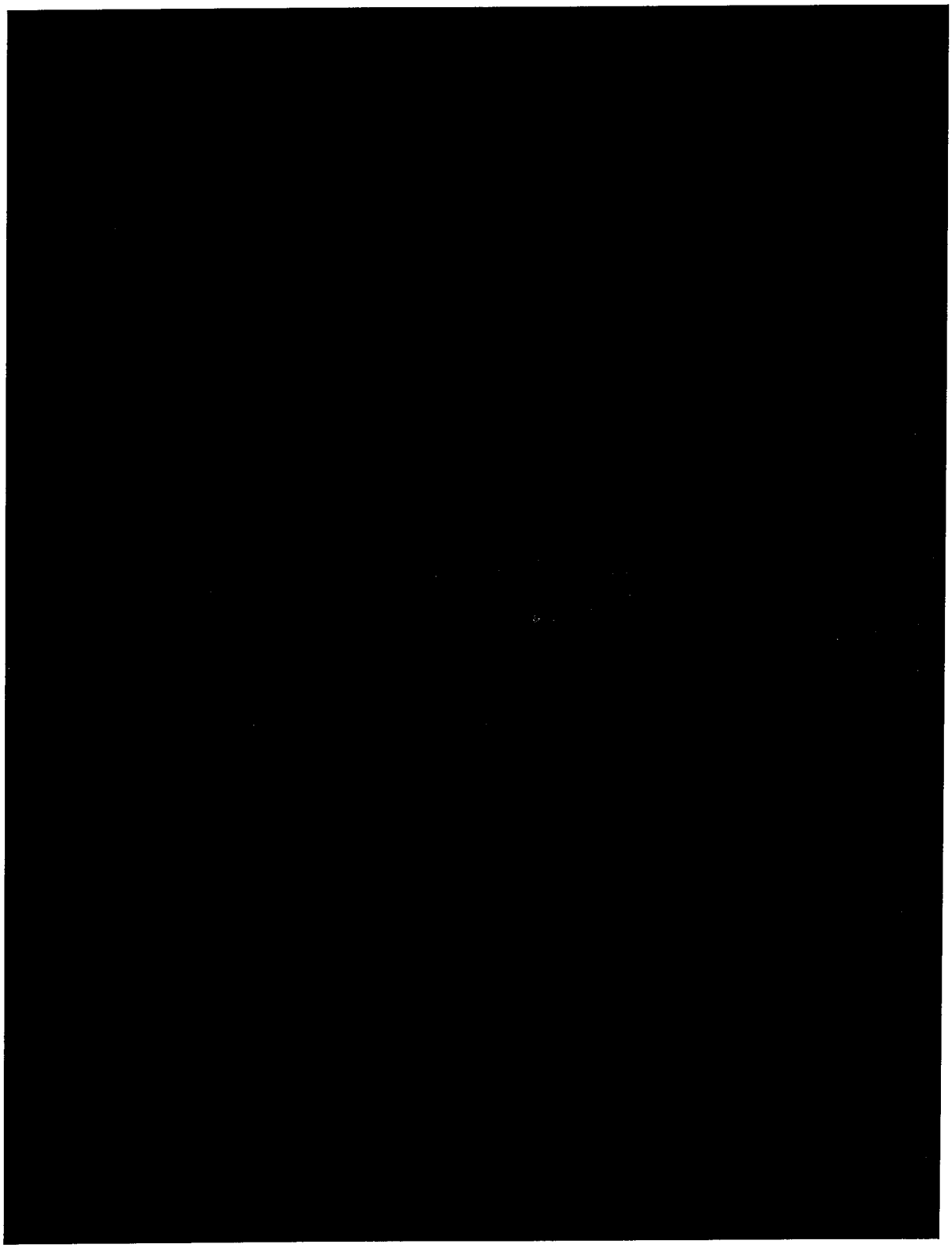
3.0 Statement of Work

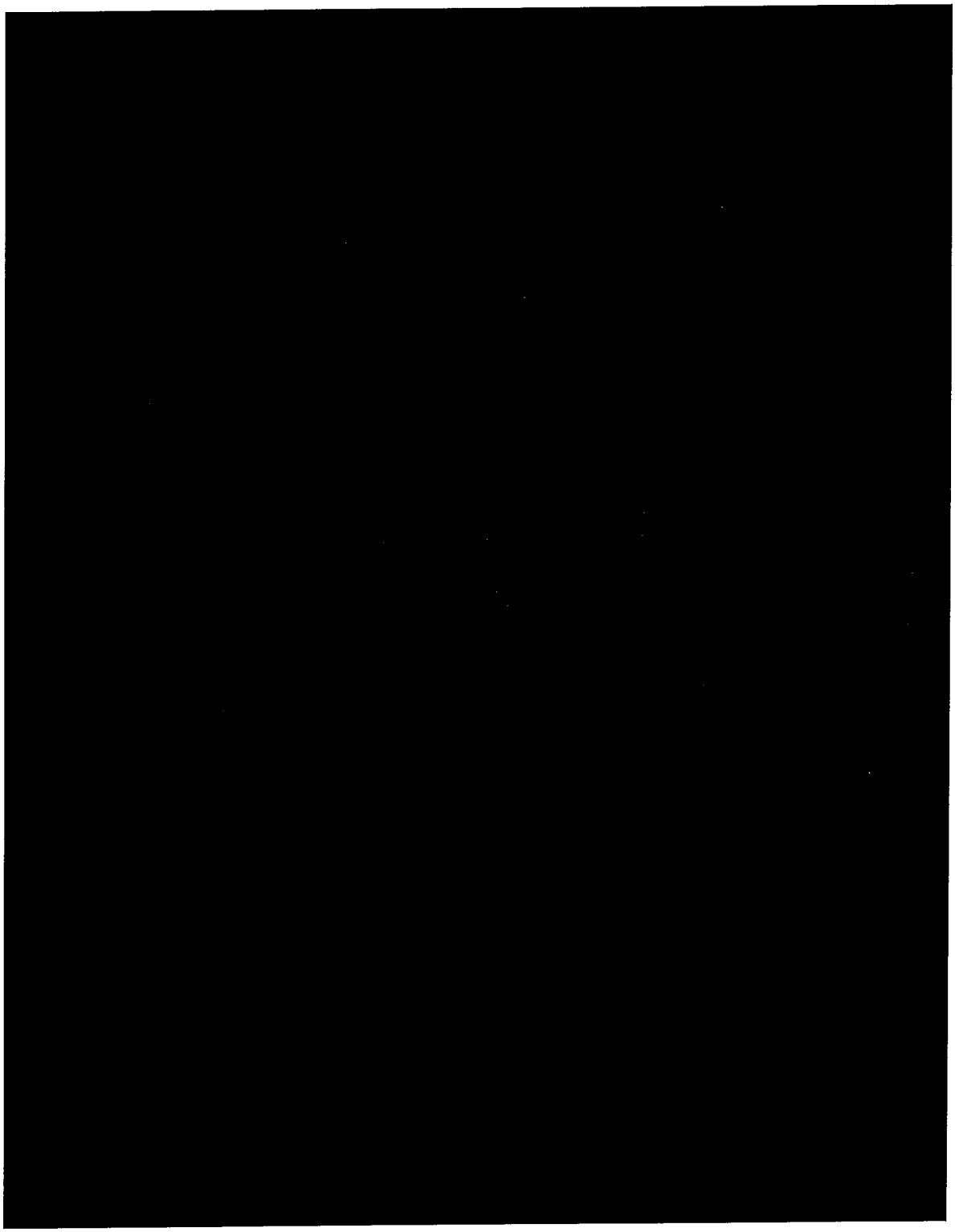
3.1 Management Approach

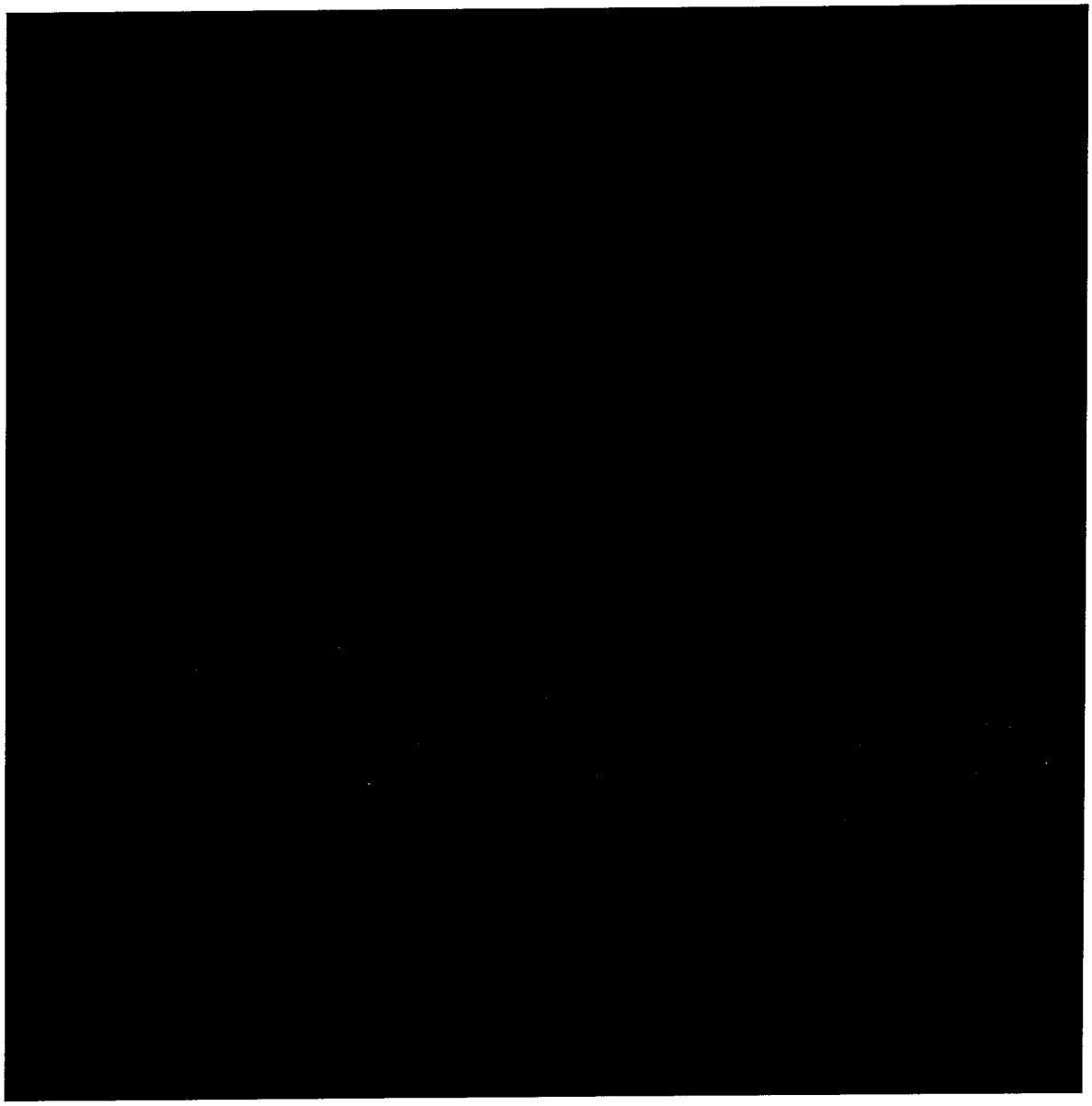












3.3 CLIN 1A – SFSC Operations Travel & ODCs

Cost Plus Fixed Fee -Office of Operational Systems

Period of Performance: July 1, 2009 to June 30, 2010

Task 2.0 Travel, Training, and Software Buys

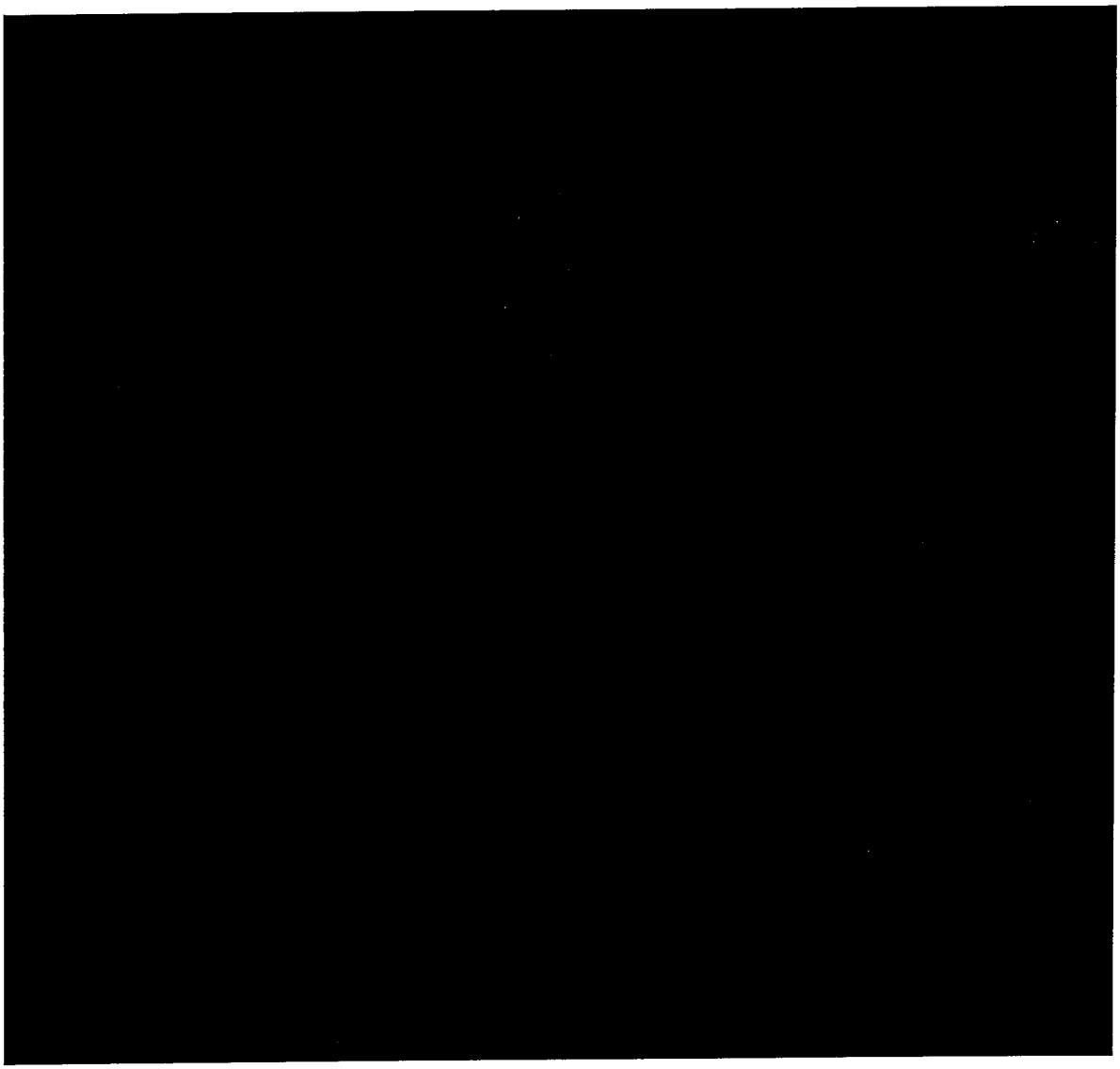
Accomplishment of the work required by this task order requires travel for weather observations, field site installations and maintenance. SAIC will coordinate and obtain the required government approvals for travel and

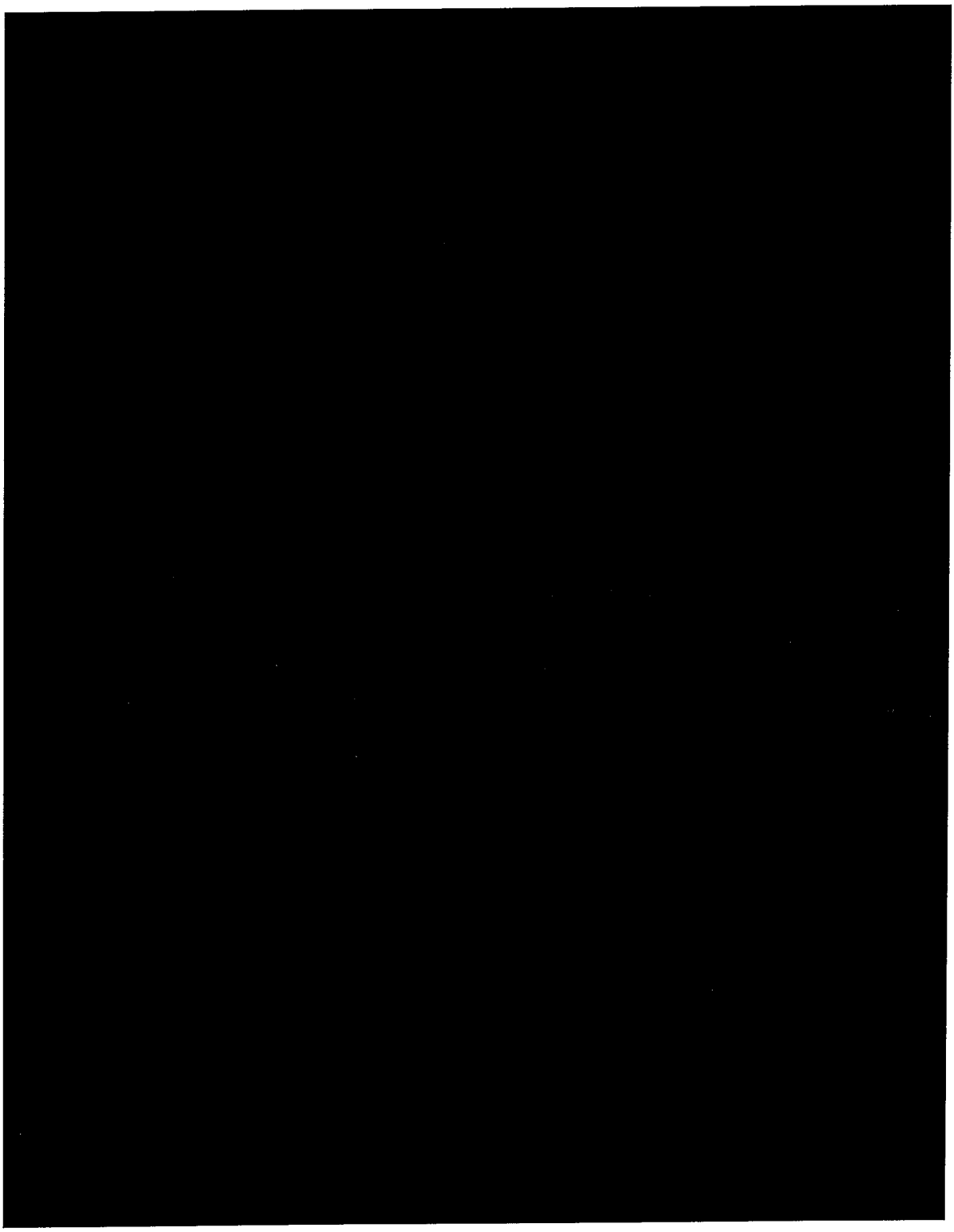
training activities. SAIC will continue to provide program support that includes coordinating travel and training at a level similar to previous years. Travel, training, and software procurements will be billed as other direct cost (ODC). SAIC has included training costs for those classes not provided by the government.

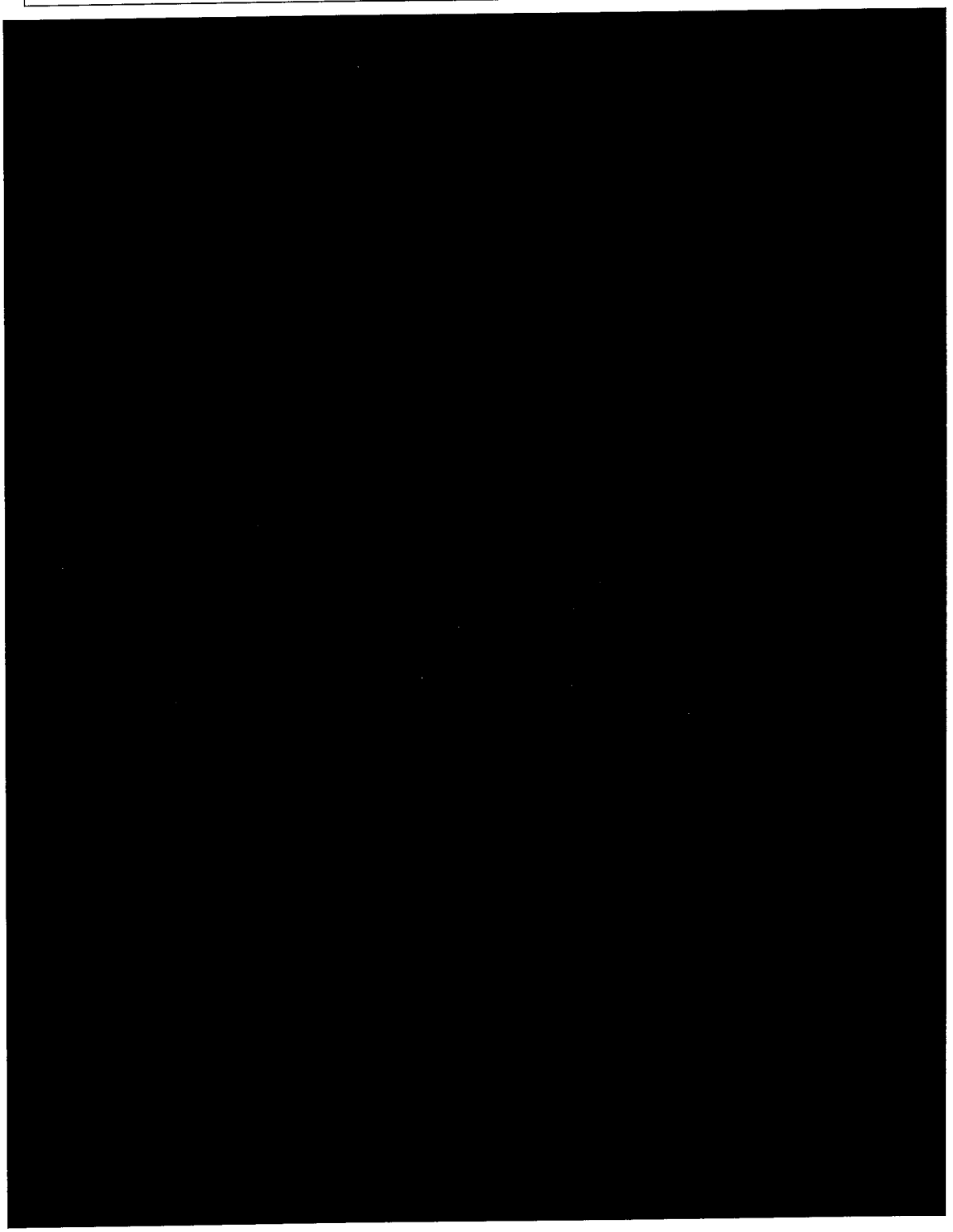
3.4 CLIN 2. Technical Support for Automated Surface Systems (ASOS Product Improvement (PI). Office of Science and Technology

Period of Performance: July 1, 2009 to June 30, 2010

3.0 ASOS PI Support







3.5 CLIN 2A- ASOS PI Travel & ODCs
Cost Plus Fixed Fee

Period of Performance: July 1, 2009 to June 30, 2010

Task 4.0 Travel, Training, and Materials
Accomplishment of the work required by this task order requires travel for weather observations, field site installations and maintenance. SAIC will continue to provide program support that includes coordinating travel and training at a level similar to previous years. Travel, training, and material/supply procurements will be billed as other direct cost (ODC). SAIC has included training costs for those classes not provided by the government.

4.0 Supporting Documents and References

None

5.0 Implementation Plan

5.1 Work Breakdown Structure

N/A

5.2 Performance Specification and Metrics

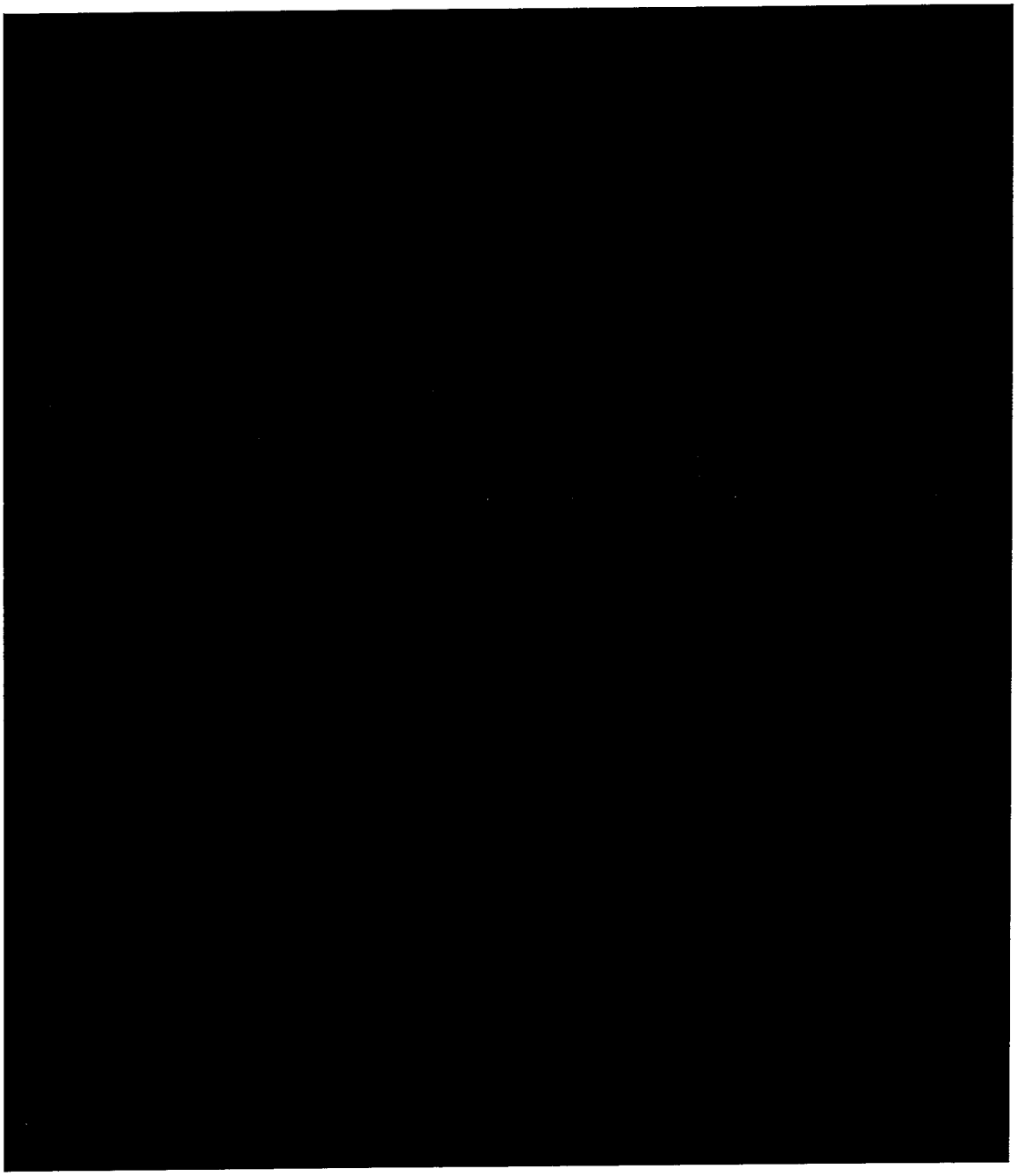
SAIC will deliver a Quality Assurance Plan (QAP) within fifteen (15) business days after award of this Task Order, which will allow NDBC to develop a Quality Assurance Surveillance Plan (QASP), which will be mutually agreed upon by the parties. The mutually accepted QASP will be incorporated into this task order.

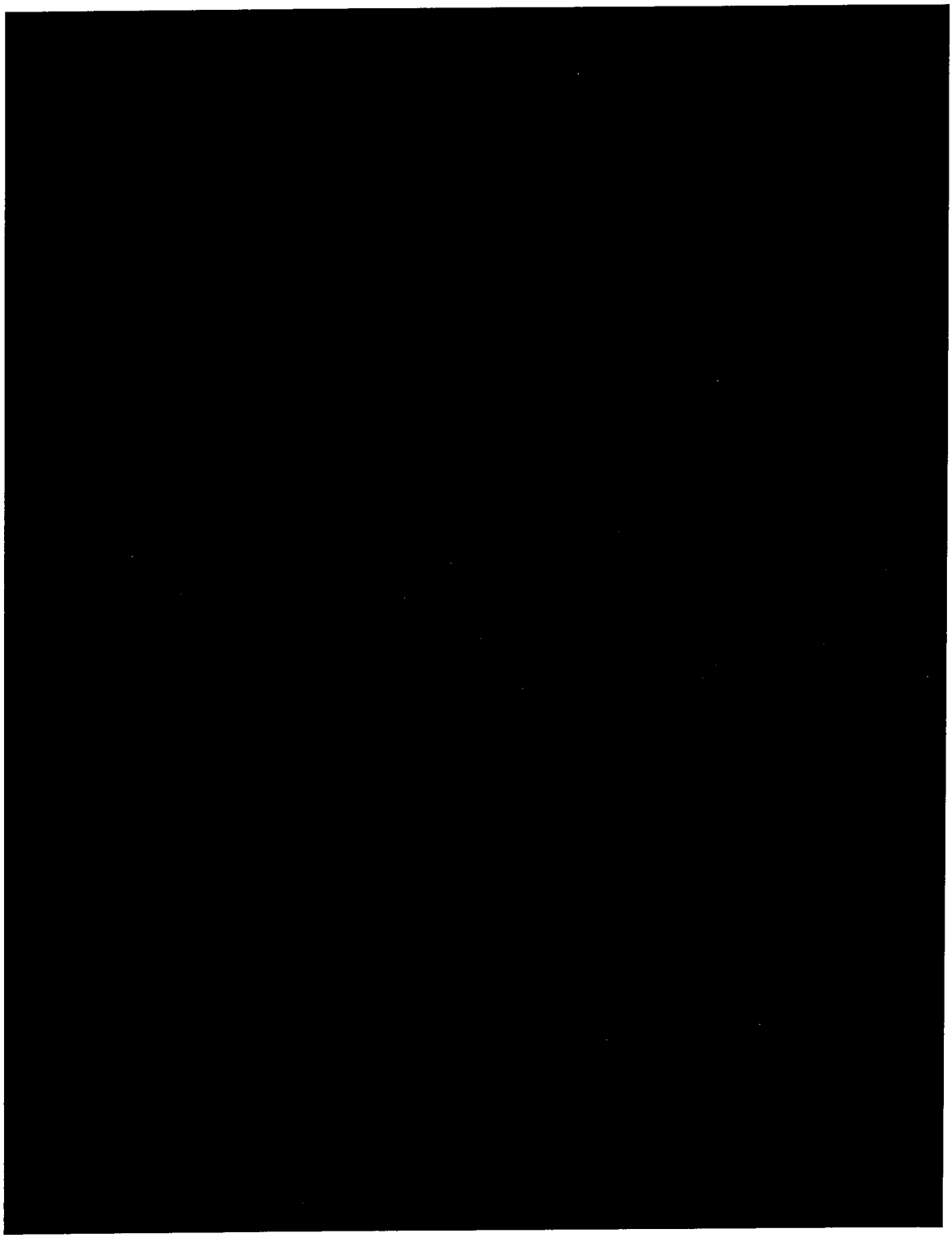
5.3 Materials, Tools and Equipment

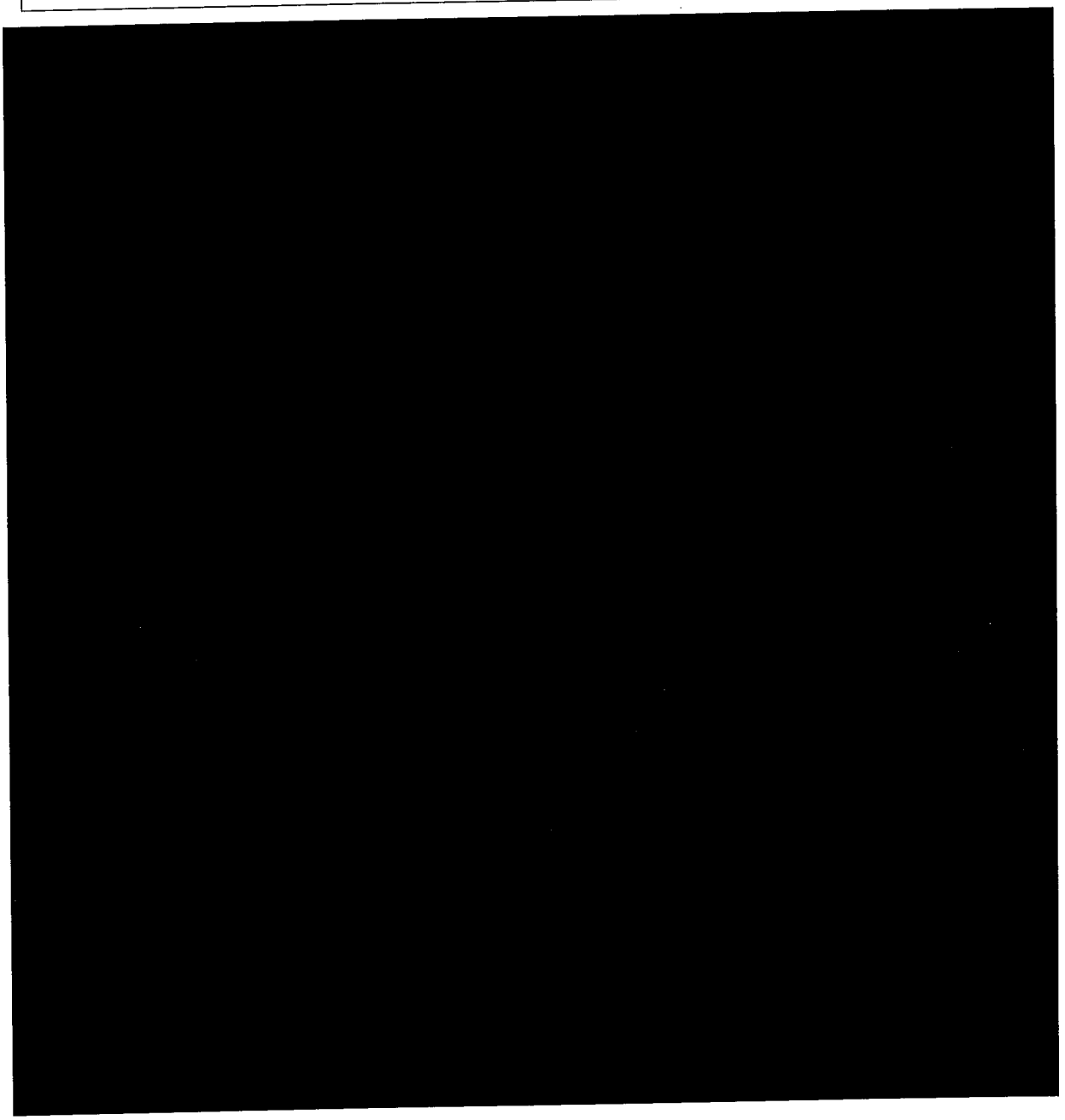
All hardware, software (with the exception of that discussed further), tools, equipment and operational materials necessary to perform the work covered by this task are provided by the Government. SAIC will purchase software in support of the IT and initial issue of equipment of this TMP such as the database software. As these software requirements have not been fully defined, SAIC has not included the cost to purchase the required software in the cost proposal for this TMP. As the requirements are defined a cost proposal will be prepared and it is assumed that funding will be made available for the purchase of the required software. SAIC will utilize all available GFE/GFI in the performance of this work.

SAIC has not included costs for any materials, tools or equipment in the cost proposal for this tasking.

5.4 Assumptions and/or Deviations







6.0 Milestones and Deliverables

6.1 Program Performance Schedule

A detailed performance schedule is to be delivered to the Government within 60 days after the award of the contract. The performance schedule is to be

delineated and updated based on the weekly status meeting with the Government.

6.2 Deliverables

See Appendix C for the Deliverables/Submittals Table.

7.0 Points of Contact

[redacted]

8.0 Cost Proposal

See the attached cost proposal. SAIC's cost proposal is based on the following:

1. SAIC has proposed labor costs in accordance with the subject contract Section B.6 Rate Schedule for Contract Year 5.
2. All assumptions included within this TMP.
3. All travel will be in accordance with the Federal Travel Regulations.
4. The period of performance is beginning from July 1, 2009 through June 30, 2010 for CLIN 1, CLIN 1A, CLIN 2, and CLIN 2A.

8.1 Terms and Conditions

Terms and conditions governing this Task Order will be those currently in effect for Contract No. QA1330-05-CQ-1035.

8.2 Contract Type

SAIC has proposed a Firm Fixed Price (FFP) for CLIN 1 and CLIN 2 labor and Cost Plus Fixed Fee (CPFF) for CLIN 1A and CLIN 2A for Other Direct Costs, to include travel, training, and conference fees.

9.0 Payment Terms

For the Firm Fixed Price elements of this task order, payments will consist of 12 equal payments over a one year period of performance. Periods of less than one year shall be prorated in accordance with the period of performance and the SAIC accounting periods covered. Payment shall be made within 30 days.

For the Cost Plus Fixed Fee elements of this task order, invoices shall be submitted upon completion of each SAIC accounting period. Payment shall be made within 30 days.

APPENDIX A – WORK BREAKDOWN STRUCTURE

Not applicable

APPENDIX B - SCHEDULE

Not applicable

APPENDIX C – DELIVERABLES

Note: Appendix C includes only specified, defined deliverables, however, SAIC will complete all tasking as defined in the Task Management Plan (TMP). Items from both the TOS for CLIN 1 and CLIN 2 that were not included in Appendix C are acknowledged and listed as independent tasking in the TMP.

TASK	Deliverable/Submittals	Due Date	Acceptance Criteria
	CLIN 1		
1.1 General ASOS Test & Field Support	At least four SAIC personnel certified in taking surface observations	Certified within 90 days of a new hire or 90 days from July 1	Employees pass NWS qualification Test by 1 July or 90 days after hire
1.1.1 ASOS Sustainment	Provide monthly project summary test report, analyses, and data to the government if needed, as well as a report upon completion of major phase	On the agreed upon date defined in the MS Project Schedule and/or the Work Task Order.	Upon submission by due date and completion of one customer review
Task 1.1.2 ASOS System Testing/ASENSE	Daily status reports provided during testing.	**COB following day**	Upon submission
Task 1.1.3 Reports	Provide Weekly summary report on all surface systems work accomplished by individual	COB Thursday	Upon submission
Task 1.2.1 General Upper Air Test & Field Support	At least four SAIC personnel certified in taking upper-air observations.	Certified within 90 days of a new hire or 90 days from July 1.	Employees pass NWS qualification Test by 1 July or 90 days after hire
1.2.2 Conducting RRS System Tests	Weekly status reports	One day prior to TRG	Upon submission by due date and completion of one customer review

1.2.3 *RRS QPL Test Support*	Provide test reports, analyses, and data to the government for the following tests: Phase II tests, Phase III tests	Phase II reports due 2 weeks after test completion. Phase III reports due 2 weeks after individual sites/tests, consolidated report 1 month after last site.	Upon submission by due date and completion of one customer review
1.2.4 Upper Air Analysis Tools	Upper-air MYSQL database	Preliminary database with government provided predefined queries/reports due December 30, 2009.	Upon submission by due date and completion of one customer review
1.2.5 Reports	Provide Weekly summary report on all surface systems work accomplished by individual	COB Thursday	Upon submission
Task 1.3.1 COOP QPL Test Support	Weekly reports for the FPR COTS evaluation. Provide test reports, analyses, and data upon completion of major phase.	Weekly-Friday of same week. On the agreed to date defined in the MS Project Schedule and/or the Work Task Order.	Upon Submisson Upon submission by due date and completion of one customer review
1.3.2 Temperature Sensor Testing	Provide test reports, analyses, and data upon completion of major phase	On the agreed to date defined in the MS Project Schedule and/or the Work Task Order.	Upon submission by due date and completion of one customer review
1.3.3 Evaluation of Cotton Region Shelters	Provide test reports, analyses, and data upon completion of major phase Install a cotton region shelter at the SFSC	On the agreed to date defined in the MS Project Schedule and/or the Work Task Order. Installation will occur no later than 7 days after receipt of assets.	Upon submission by due date and completion of one customer review Written concurrence by the TM that the unit has been properly installed

1.4.1 Surface Systems Maintenance and Upgrade Support	Maintenance records and PM scheduling	PM schedules will occur in accordance with technical manuals. Records submitted by next business day..	Maintenance satisfactorily completed on time and records on time.
1.4.2 Upper Air Site Maintenance	Maintenance records and PM scheduling	PM schedules will occur in accordance with technical manuals. Records submitted by next business day..	Maintenance satisfactorily completed on time and records on time.
1.4.5 Test Chambers Evaluations	Report on evaluations of each major test chamber (maximum 10 pages	Oct 15, 2009	All reports, upon submission by due date and completion of one customer review
1.4.6 Property Management	Annual inventory	In accordance with NWS requirements.	Upon submission by due date and completion of one customer review
1.4.9 General Infrastructure Support	Work areas clean and organized	Upon completion of any task, work area must be cleaned within 1 day.	Upon satisfactory inspection by SAIC lead or TM
1.4.10	Upper Air Data Base Complete Sensor Database	Due 1 December 2009. Due 30 May 2010	Upon satisfactory test run of data base
	CLIN 1A		
Task 2.0 Travel, Training, and Software Buys	Trip Reports	Received by TM NLT 10 working days after return	Upon Submission
	CLIN 2		
Task 3.1, Ceilometer Sub-Visible Ice Crystal Study			

3.1.1	Install ceilometer and expand DAS at Bismarck	August 17,2009	Upon completion of trip report and satisfactory operation of equipment
3.1.2	Install ceilometer and DAS at Aberdeen	Sept. 14, 2009	Upon completion of trip report and satisfactory operation of equipment
3.1.3	Interim ceilometer performance reports	Oct. 15, 2009 Nov. 13, 2009 Jan. 15, 2010 March 15, 2010 May 14, 2010	Upon submission and completion of one customer review
3.1.4	Presentation of interim ceilometer performance report	Oct. 29, 2009 Nov. 27, 2009 Jan. 29, 2010 March 29, 2010 May 28, 2010	Delivery of pre-brief and upon Presentation
3.1.5	Final report and analysis of ceilometer performance	June 15, 2010	Upon submission and completion of one customer review
3.1.6	Presentation of final report on ceilometer performance	June 29, 2010	Delivery of pre-brief and upon Presentation
3.2 AWPAG Transfer Function Development			
3.2.1	Install AWPAG at NCAR Marshall Test Facility in Colorado	October 5, 2009	Upon completion of trip report and satisfactory operation of equipment
3.2.2	Interim report on AWPAG transfer function development based on 2009-2010 winter season	Jan. 29, 2010	Upon submission and completion of one customer review
3.2.3	Presentation of interim report on AWPAG transfer function development	Feb. 12, 2010	Delivery of pre-brief and upon Presentation

3.2.4	Final report and analysis of AWPAG transfer function development	May 14, 2010	Upon submission and completion of one customer review
3.2.5	Presentation of final report on AWPAG transfer function development	June 2, 2010	Delivery of pre-brief and upon Presentation
Task 3.3 EPI activities			
3.3.1	Test Plan for testing hail detector and hail pads in the lab and in the field	August 30, 2009	Upon submission and completion of one customer review
3.3.2	Install one prototype hail detector at CoCoRAHS site and one at Sterling for field testing	Sept. 1, 2009	Upon completion of trip report and satisfactory operation of equipment
3.3.3	Testbeds and DAS configured for field test of COTS EPIs sensors at Sterling and Johnstown	July 31, 2009	Upon completion of trip report and satisfactory operation of equipment
3.3.4	Test Plan for evaluation of performance of COTS sensors at Sterling and Johnstown and CoCoRAHS site	July 31, 2009	Upon submission and completion of one customer review
3.4.1	Johnstown testbed documentation updated as need after upgrades or modifications	15 working days after completion of upgrade/modification	Upon submission and completion of one customer review
3.5.1	Return of ceilometer equipment from Mount Washington Observatory	August 31, 2009	Upon receipt of the returned equipment in good condition and submission of the trip report.
3.6.1	Return of ceilometer equipment from Fairbank, Alaska	August 31, 2009	Upon receipt of the returned equipment in good condition and submission of the trip report.

3.7.1	Klett Software final analysis and final report	May 05, 2010	Upon submission and completion of one customer review
		CLIN 2A	
4.0 Travel, Training, and Materials	Travel/Trip Reports	Received by TM NLT 10 working days after return	Upon Submission

Task Order 8 Modification for Contract Year 5

Title of Task Order:	Technical support services for the Sterling Field Support Center
OPS Branch:	Observing Systems Branch (OPS22) / OPS52
Performance Period:	Base – July 1, 2009 - Sept 30, 2009 Option 1 – Oct. 1, 2009 - Dec. 31, 2009 Option 2 – Jan. 1, 2010 - March 31, 2010 Option 3 – April 1, 2010 - June 30, 2010
Task Order Type:	CLIN 7 SFSC Operations Labor – FFP CLIN 7A SFSC Travel & ODCs – CPFF CLIN 9 ASOS PI Labor – FFP CLIN 9A ASOS PI Travel & ODCs – CPFF
Purpose: (How this TO relates to OPS's Mission or What Problems need to be solved)	The Office of Operational Systems (OOS) is responsible for many fielded operational observation networks and observing systems. Within OOS, the Field Systems Operations Center (FSOC) is responsible for managing the Automated Surface Observing System (ASOS), the Cooperative Observer Program (COOP) Fischer Porter Rebuild kits, and systems associated with the upper air program. The Observing Systems Branch (OSB) within FSOC is responsible for management of the above-mentioned programs from an operational perspective along with the Sterling Field Support Center (SFSC) located in Sterling, Virginia. Until recently, the SFSC functioned mostly as a test facility for in situ sensors and measurements with some support for developing specifications and some field support. As certain activities begin spinning down in the area of ASOS product improvement, the National Weather Service (NWS) Headquarters (HQ) has requested FSOC begin supporting the ASOS Sustainment effort, and take a more active role in the area of field support. Thus with the commissioning of the RRS systems beginning in July, the SFSC will begin developing a help desk function to support the Commissioned RRS systems and sites which have the Fisher and Porter Rebuild. SFSC will also continue to support current and future activities of the other offices within the NWSHQ such as the Office of Science and Technology ASOS Product Improvement (ASOS PI). The ASOS PI support will consist of sensor testing and algorithm development.
Background:	The SFSC supports NWS operations. This includes field support activities, testing of new surface, upper air and climatological equipment as well as ECP testing of changes to legacy systems. Additionally, this may include data continuity studies, which evaluate the impact a change has on an observing network. Tasking for these activities can come from any organization within the NWS; however, the principal customers are the Office of Operations Systems (OOS)

which SFSC is a part of, the Office of Science and Technology, the Regional Headquarters, and all Weather Service Forecast Offices (WFO). The Government TM or his designee is responsible for directing all tasks and setting priorities under this task Order. Any changes in relation to price, schedule, or performance will only be authorized by the Contracting Officer. The contractor shall be responsive to all tasks assigned to it under this Task Order.

For this contract period the contract support will be divided into two CLINS. CLIN 7 will be FFP SFSC Operations and CLIN 9 ASOS PI which will also be FFP. Each CLIN will have a sub CLIN for travel, training and ODC.

The tasks outlined in this document apply to the Sterling, and Johnstown facilities, and any future sites selected by the Government to support future SFSC operations.

The following information is provided as background concerning some of the systems/networks supported.

Technical support for Surface Observing Systems is the Automated Surface Observing System (ASOS). The ASOS is the nation's primary land based surface weather observing network. It is a joint DOC/DOD/DOT project with over 1000 observing systems. The ASOS Product Improvement Program is designed to improve maintainability, measurement quality and utility, and ensure the requirements for NWS & Aviation forecasts are met. Other surface systems will be supported as requested by the TM.

COOP FPR technical support includes the nationwide network of sensors that record weather information for use in the climate community. The sensors record a variety of meteorological measurements including temperature, dew point temperature, and precipitation accumulation. The COOP program currently uses a Fischer and Porter (FP) rain gauge for measuring precipitation accumulation every 15 minutes. The current sensor uses a paper tape punch mechanism that is obsolete and the information it records can be hard to collect. Therefore, the NWS has undertaken a FPR to replace the tape punch mechanism with a device that will have digital data recording and reporting capabilities.

For the technical support for Upper Air Observing Systems, the NWS supports 102 Upper Air sites in its network. Of these, 40 are MicroART, 3 are Sippican W9000 systems, the remaining sites are Radiosonde Replacement Systems (RRS), and 10 are CHUAS stations. All of these systems are supported by SFSC. These activities include

	the implementation of improved upper air observing equipment including the surface observing equipment (supports upper air operations), upper air tracking systems, radiosondes, and associated data acquisition and communication systems. The SFSC will also support Alaska region in developing a plan to demonstrate the feasibility of using a hydrogen generator at select sites within the region, and prepare for conducting RRS data continuity test. The lead Technical Manager (TM) at Sterling is Jim Fitzgibbon (NWS), Phone (703) 661-1243 Cell (301) 448-6609. Back up TM will be Jennifer Dover, (703) 661-1259.
Scope of Effort:	Under the direction of the Government TM or his designee, the Contractor shall provide technical support services for all tasks under this task order. The Government TM or his designee is responsible for assigning all tasks and setting or changing priorities as long as price, schedule and/or performance are not affected. The Contractor is responsible for coordinating task activities and for reporting the completion of all milestones in accordance with agreed to schedules. There will only be one team lead that will perform management of the contract staff. Since the group is so small the administrative support for the team can be shared by the team lead and the individual team members, thus no dedicated administrative personnel is required. To capture the day to day tasking the existing work request form will be used. If the Contractor has a question or concern about a particular work request it will be brought to the attention of the requestor and/or TM for discussion and resolution. Once a work request is completed the requester and TM will be notified. Prior to a due date if it becomes apparent the due can not be met, the contractor will notify the requester and TM. The contractor shall provide algorithm development support, perform equipment maintenance on test infrastructure, perform test bed upgrades, and provide meteorological observations (surface, climate, and upper air) during significant weather events and as scheduled to meet test requirements. The Sterling Field Support Center activities also include operational support for NWS observing systems, including the deployment and initial issue of new equipment, software/firmware, and modifications. Because the exact schedules and milestone cannot be pre-determined in most cases, the Contractor shall prepare task plans, staff work assignments, projected schedules (MS Project) for completion for each work assignment and deliver these to the government TM for approval on a weekly basis. Status reports documenting work in-progress or completed will be provided each week to the TM along with updated MS project schedules. Reports will be delineated by task and by individual and include a list of all

	action items as well as a list of work order created during the last week. The report will cover CLIN 7 and 9. The Government reserves the right to request re-assignment of Contractor staff if new or higher priorities exist as long as price, schedule and/or performance are not affected. The TM or his designee will hold a review and coordination meeting with the contractor's team leaders once a week to identify and communicate priorities. Contractor staff supporting the SFSC shall be multi-disciplined in terms of being able to work across system types, diverse technologies, and applications. All Contractor staff members are expected to work a normal five-day 8-hour/day week in accordance with the contract. Initially, when the help desk becomes operational the contractor will be required to cover the period of 6:00 A.M. to 10:00 PM Monday through Friday. The 6:00 A.M. to 10:00 PM coverage is expected to begin in December. Since actual calls to the help desk are expected to be limited personnel assigned a help desk shift are expected to perform their daily duties. In addition, during significant weather events assigned personnel may be required to work extended hours, including weekends. Maintenance staff shall be proficient in multiple platforms and systems. In execution of this task order, miscellaneous support is necessary. This support includes, but is not limited to, coordinating activities with the Government TM as appropriate, the development of test plans, test procedures and Standard Operating Procedures (SOP) for the maintenance and operation of equipment and observing practices, presentations, technical reviews, Environmental Compliance, Health and Safety; Training; Administration; Logistics; and Technical Training.
Tasks:	**CLIN 7- SFSC Operations Labor** **Firm Fixed Price** **Period of Performance: July 1, 2009 to June 30, 2010** **1.0 SFSC Surface Testing & Field Support** 1.1 *General ASOS Test & Field Support* The contractor will provide support for general ASOS tests not covered under Product Improvement or System Tests, e.g., test of a replacement component. Support will also be provided to field and HQ units contacting the center with questions requiring a response. This activity may require travel to remote site to support the field or testing of systems. At least 4 contractor staff including the appropriate team lead should be certified to take surface observations and proficient in testing methodologies. Certification of personnel is to be in accordance with NWS policy and procedure. Personnel designated to take surface observations will be required to be certified within 90 days of employment or 90 days from July 1 for current employees. The contractor should

have a designated person and process in place to quality control surface observations. Weather observations will be made on an as-needed basis during weather events that are expected to produce weather data that will help meet the goals of the testing programs. There will be limited surface observation take to support Clin 7.

1.1.1 *ASOS Sustainment*

The contractor will begin developing test plans and procedures for the evaluation of replacement ASOS sensors. In addition, the contractor will also support the ASOS Sustainment Team developing the replacement ACU/DCP.

1.1.2 *ASOS System Testing/ASENSE*

The contractor will support ASOS System tests including the use of the ASENSE sensor simulator at Sterling. El-Techs and scientist will be assigned to provide technical support, on an as-needed basis, to set up and perform ASOS system testing for new ASOS firmware loads before they are fielded at operational ASOS sites. This work will require scientist to perform test procedures for testing firmware changes, sensor upgrades, and software fixes when new firmware versions are released. It is anticipated that this testing will require approximately one week for minor software builds and 3 weeks for major software builds. The NWS is expecting 2 major builds and 3 minor builds. The contractor will conduct ASOS ST using the three test ASOS systems at Sterling and the ASENSE sensor simulator. This support also includes running and updating test procedures and test datasets to test the mathematical bounds of the ASOS algorithms being tested. Test Track will be used to document deficiencies.

1.1.3 Weekly *Reports*

All contractor personnel will provide input to weekly activity reports in paragraph form, through the assigned Lead. Weekly report shall also include weekly work acceptance form.

1.2 Upper Air Testing & Field Support

1.2.1General Upper Air Test & Field Support.

The contractor will develop the plan to conduct as many as 450 radiosonde test flights, which can encompass nighttime as well as weekend operations. This includes multi-radiosonde releases. Test flights may be required at various sites away from Sterling requiring travel as requested by TM. The contractor will generate the procedures for certifying the contractor staff with use of the new hydrogen generator in accordance with NWS safety protocols. The contractor will test balloons in support of the NWS Balloon tests and support CHUAS test flights. At least 4 contractor staff will be certified in upper air and proficient in testing methodologies. Certification of personnel is to be in accordance

with NWS policy and procedure. Personnel designated to take Upper Air Observations will be required to be certified within 90 days of employment or 90 days from July 1 for current employees. The contractor should have a designated person and process in place to quality control Upper Air Observations.

1.2.2 *Conducting RRS System Tests*

The contractor will support and conduct System Tests for Build 2.0 software. This will require executing government-developed test procedures and providing Test Track deficiency reports as problems are found.

1.2.3 *RRS QPL Test Support*

The contractor will conduct testing of radiosondes from multiple vendors in order to place them on the Qualified Products List for the National Weather Service. In-depth testing will occur at the Sterling site which will include flights (day and night) and use of multiple environmental chambers. The government will coordinate flight test activities on ATM and snow-white capabilities. Testing will also involve traveling to different climatic regions in order to test the radiosonde in a wide variety of conditions which are seen operationally. Test teams consisting of one to two contract personnel are expected to travel to at least four sites. Duration on site is expected to be 25 days. This effort is expected to extend past the end of this contract year. At least two contractor staff will be required to demonstrate ATM activities proficiency to the Upper Air Manager within 90 days of employment or 90 days from July 1 for current employees.

1.2.4 *Upper Air Analysis Tools.*

The contractor's computer personnel will upgrade software data analysis tools and procedures to automate the data collection and analysis. Experience with MYSQL is required to complete this task.

1.2.5 *Weekly Reports*

All contractor personnel will provide input to weekly activity reports in paragraph form, through the assigned Lead. Weekly report shall also include weekly work acceptance form.

1.3 COOP Testing & Field Support.

1.3.1 COOP *QPL Test Support*

The contractor will continue QPL qualification testing to compare the performance of rebuilt Fischer and Porter gauges (gauges that have been modified with installation of FPR kits) against the specification. An ASOS model OTT AWPAG located inside a DFIR will also be used as a comparison sensor for the outdoor performance testing. The contractor will receive COTS Fisher Porter rebuild systems and evaluate their performance along with government personnel. The contractor will also monitor

performance of these systems at Sterling and, other remote sites. The data will be analyzed using spreadsheets that contain metrics.

1.3.2 *Temperature Sensor Testing for the COOP network*

The contractor will develop a test plan and procedures for the evaluation of temperature sensors which can be used in the COOP network. Testing is expected to begin in October. The procurement and testing of the sensors is expected to follow a QPL process.

1.3.3 Evaluation of Cotton Region Shelters

The contractor will develop a test plan and procedures for the evaluation of cotton region shelters which can be used in the COOP network. Government will provide training in support of this effort.

1.4 SFSC Infrastructure Support

1.4.1 *Surface Systems Maintenance and Upgrade Support*

The contractor will perform maintenance and upgrades on legacy ASOS equipment and test-beds at the Sterling Facility. Maintenance actions are limited in time and amount to a quantity similar to previous years.

1.4.2 Upper *Air Site Maintenance.*

The contractor will perform test site maintenance on existing Upper Air systems, test equipment, and support equipment at Sterling, Va. Maintenance actions are limited in time and amount to a quantity similar to previous years. The contractor will develop maintenance and operations procedures for the hydrogen generator including safety procedures to be used in the new balloon inflation building.

1.4.3 *Standard Operating Procedures.*

The contractor will develop Standard Operating Procedures (SOPs) for operating and maintaining test assets, including the Sterling test chambers. The contractor will also prepare SOPs for conducting standardized and specialized tests. The contractor is authorized to have some SOP's contain NWS proprietary information, which will be identified as proprietary. **SOPs will be created on an as needed basis for the contractor to maintain proficiency. Before developing an SOP, it will be approved by the TM.**

1.4.4 *Test Hardware Maintenance*

The contractor will ensure test systems in use are maintained and operational for tests.

1.4.5 *Test Chamber Evaluation*

The contractor will conduct operational evaluations of existing chambers and develop a maintenance schedule for chambers and other test assets. The contractor will have at least two staff members proficient in the use of the wind tunnel and RH laboratory measurements.

1.4.6 *Property Management*

The contractor will continue with providing property management support, shipping and receiving support and implement plan for tracking and verifying receipt of shipments of new equipment deployed to the field.

1.4.7 *Computer/Network Maintenance*

The contractor will provide general computer/network maintenance at the Sterling Facilities. This includes minor hardware, account setup, and installation of office application programs, and may include network assurance/security responsibilities for NWS required updates or modifications.

1.4.8 *Installation, Operations, and Maintenance Document Reviews.*

The contractor will assist in the development and review of documents associated with installation, operation, and maintenance of equipment. The contractor will assist in the development and review of documents associated with operations of existing/new equipment and the taking of observations.

1.4.9 *General Infrastructure Support*

The contractor will assist in developing a professional work environment; including the organization and cleaning of all SFSC test assets, the replacement/surplus of old and obsolete equipment and implement a clean-as-you-go concept.

1.4.10 *Software/Database Support*

Contractor will develop a database with user interface for queries to support the Radiosonde QPL process. Contractor will finish the relational database that stores all sensor (surface climate and upper air) and related data in the database. The database will support/automate data acquisition, data analysis and report writing

1.4.11 *Customer Relations Support*

The contractor will assist the Government in implementing the concept of the "Sterling Field Support Center" by fostering a symbiotic relationship with field sites and regional headquarters. This will allow for an exchange of information and ideas. This process will include site visitations/inspections by Sterling personnel and the hosting of field/regional personnel at Sterling to support operations. Proper phone etiquette will be used by all personnel.

1.4.12 *Technical Support Desk.*

The contractor will assist in the developing and establishing of the SFSC help desk. The contractor will assist field sites and headquarters personnel in the timely analysis of equipment and procedural problems. The contractor will assist in implementing solutions to problems. At times, this may require travel to a site to assist in the problem solving process or to implement a solution/problem work-around. The contractor will provide

emergency response to operational problems. This effort will initially be a part time effort anticipated to be one or two phone calls a day and one assist visit per quarter. The contractor will provide field support in responding to questions from the field and diagnosing problems which might arise. Contractor will review material and help plan for a web based support desk. Proper phone etiquette will be used by all personnel.

CLIN 7A – SFSC Operations Travel & ODCs
Cost Plus Fixed Fee
Period of Performance: July 1, 2009 to June 30, 2010

2.0 Travel, Training, and Software Buys

The contractor will continue to provide program support that includes coordinating contractor travel and training at a level similar to previous years. Travel, training, and software procurements will be billed as other direct cost (ODC).

CLIN 9- ASOS PI Labor
Firm Fixed Price
Period of Performance: July 1, 2009 to June 30, 2010

3.0 ASOS PI Support

3.1 *Ceilometer Sub-Visible Ice Crystal Study*

The study of the performance of the replacement ceilometer as it pertains to falsely detecting and reporting sub visible ice crystal layer formations will continue. A second ceilometer will be installed at the forecast office in Bismarck, ND, and a ceilometer will be installed at the forecast office in Aberdeen, ND. At Aberdeen, a DAS will be installed and at Bismarck the existing DAS will be used. The effort involved will include monitoring the climatology for conditions conducive to sub visible ice crystal layers and correlating these events to the ceilometer reports. The forecast office staff will contact SAIC to report conditions favorable to sub visible ice crystal layer formations.

3.2 *AWPAG Transfer Function Development*

The AWPAG transfer function development activity is to compare the catch in the standard ASOS AWPAG configuration (with Auxiliary 8 foot diameter Alter windscreen) to the catch of an AWPAG inside a Double Fence Intercomparison Reference (DFIR). The DFIR is designed to maximize catch and the ratio of the catch in the AWPAG with ASOS shield configuration to the DFIR catch is the transfer function. The ratio depends primarily

on wind speed and secondarily on temperature, so developing an equation relating the AWPAG/ DFIR ratio to wind speed and temperature requires long term field testing in a wide variety of conditions of wind and temperature. Data to support development of the transfer algorithm was collected at Sterling and the NWS test facility at Johnstown during contract year 04 (2008-2009). During contract year o5 (2009-2010) data will be collected from AWPAGs located at NCAR, Johnstown, and Sterling. NCAR currently has one AWPAG installed within a DFIR. The effort will be to install a second AWPAG with Auxiliary Alter screen at the NCAR site, and to collect the data from NCAR Data Acquisition Systems and develop the final transfer function algorithm structured English.

- AWPAG with new 8 foot diameter Alter shield installed at NCAR
- Collection of data from all three test sites
- Analysis of data, formulation of initial transfer algorithm, generate final report provide briefing of results.

3.3 *EPI activities*

EPI activities will be primarily directed at evaluation of COTS sensor performance, and developing hail detection reference capabilities. NASA has developed a hail detector which we will duplicate in-house or through a build-to-specification contract. It is anticipated that there will be a field test of EPI COTS/prototype sensors in mid-summer of 2010. Analyst/ clinical observer support will be required for observing in support of the field test.

- Modify DAS computer software to accommodate communication with COTS sensors
- Install COTS EPI sensors (estimated 4 sensors from 3 vendors at 2 locations)
- Conduct lab hail simulation tests to validate use of NASA hail detectors
- Conduct field test of hail detector to determine if performance in hail and heavy rain
- Evaluate available information, including the CoCoRAHS program for suitable venues for field testing in conjunction with NASA hail detector
- Update Test Plan for field test of COTS EPI sensors
- Conduct observations at Sterling and Johnstown to establish performance of COTS sensors
- Collect and evaluate data from remote sites where hail standard is installed
- Generate Interim and Final reports on COTS EPI performance

3.4 *Maintenance of Johnstown Testbed*

The National Weather Service has established a remote winter test site at the Johnstown, Cambria airport. The test bed and observation trailer must be maintained during the contract period. Periodic and impromptu maintenance and upgrades on current and future test equipment, to include computer support, will be performed. Travel will be required and charged under CLIN 9A.

3.5 *Retrieval of Ceilometers and equipment from Mount Washington Observatory, NH*

Testing of replacement ceilometers at Mount Washington has concluded. Two CL31 ceilometers, mounts and misc. equipment must be removed from the test venue and returned to Sterling.

3.6 *Retrieval of Ceilometers and equipment from Fairbank, Alaska*

Testing of replacement ceilometers at Fairbanks has concluded. Two CL31 ceilometers, mounts and misc. equipment must be removed from the test venue and returned to Sterling. To meet the delivery requirements for the ice crystal test installations, the Fairbanks retrieval should be planned for late July 2009.

3.7 *LIDAR Klett Algorithm Activities*

In the 2009 contract year the NWS and SAIC jointly developed very preliminary analysis software to be used in conjunction with the LIDAR raw output data to post-process cloud height information. This effort involved using high resolution data from the Sigma Space LIDAR in conjunction with a Klett algorithm derive optical extinction coefficients which were then used to report cloud data. The NWS has determined that it will be necessary to complete the development and implementation of the Klett algorithm to support evaluation of the ASOS replacement ceilometer during compliance testing of the algorithm which will extend the ceilometer reporting range from 12,000 ft to 25,000 ft. Activities will be primarily software engineering efforts directed at completion of the Klett implementation and demonstration that it is effective. Travel is not anticipated for this effort. This effort includes:

- Modify existing Klett post processing algorithm to post process Sigma Space LIDAR raw output data.
- In conjunction with NWS, test the resulting Klett post processing algorithm.
- Deliver resulting software product.

CLIN 9A- ASOS PI Travel & ODCs
Cost Plus Fixed Fee

	Period of Performance: July 1, 2009 to June 30, 2010 **4.0 Travel, Training, and Materials** The contractor will continue to provide program support that includes coordinating contractor travel and training at a level similar to previous years. Travel, training, and material/supply procurements will be billed as other direct cost (ODC).
Assumptions/ Constraints (Security, Safety, Accessibility, etc…)	1. Environmental Compliance, Health and Safety requirements must be observed at the Sterling and Johnstown Test Facilities. Training on these issues for Sterling personnel is to be included in the TO cost proposal under CLIN 7A, CPFF. 2. General computer/network maintenance will be required at the Sterling Test Facilities. Costs for such support shall be included in the cost proposal under CLIN 7, FFP. The National Weather Service will be responsible for IT security and the update of systems and servers to meet NWS requirements. 3. The Government to provide support for contractor personnel to receive training in the maintenance of Upper Air and ASOS equipment. 4. The Government to provide support for contractor personnel to receive technical training for HR measurement. 5. Government to coordinate/approve travel and training activities with appropriate Contractor personnel. 6. All contractor personnel will follow DOC and NOAA IT Security Policy and the IT Security policy and procedures in the NWS Directives System. Contractor personnel will complete IT Security training and sign the NOAA Rules of Behavior for NOAA Information Systems. This will include policies specific the SFSC complex. 7. For the purpose of estimating this Task Order, assume a maximum number test flights conducted by contractor will be 450. 8. The Government requires that at least one contractor be qualified on RRS maintenance and one contractor be qualified on MicoArt maintenance. This person may achieve their qualification during the period of performance. 9. The Government requires that at least four contractors be certified to take Upper Air observations.

10. The Government requires that at least four contractors including the appropriate team lead be certified to take surface observations.

11. No telework is allowed on this contract. Alternate work schedule is authorized, as appropriate, with core hours between 9:00 AM and 2:00 PM Monday through Friday. Sterling lead should coordinate to ensure adequate coverage to meet mission requirements.

12. The contractor is to follow Government guidelines in the event of weather or other emergencies. Meaning, if the Government personnel at Sterling are notified of a liberal leave policy for bad weather or other emergencies the non-essential contractor personnel may follow the same policy of using their personal leave if they feel it is unsafe to come to work. If the Sterling facility is closed due to weather or other emergencies Federal and contractor non-essential employees may take administrative.

13. Essential contractor personnel are defined as meteorologists on observational duty for surface and/or upper air programs.

14. The Government is identifying the following positions as key personnel in this task order and reserves the right of approval on personnel selected to fill these positions upon vacancy. Further, these positions should be filled as referenced in section H13 of the basic NDBC Technical Service Contract.
Key Positions: Sterling Lead
Senior Meteorologist
Senior Software Engineer

Deliverables:

Deliverables	Due Date
CLIN 7 SFSC Operations Labor	
1.1 At least four contractors certified in taking surface observations.	Certified within 90 days of a new hire or 90 days from July 1.
1.1.1 Provide test reports, analyses, and data to the government.	On the agreed to date defined in the MS Project Schedule and/or the Work Task Order.
1.1.2 Daily status reports provided during testing.	**COB following day**

	1.1.3 Provide weekly status reports.	Weekly-Thursday of same week.
	1.2.1 At least four contractors certified in taking upper-air observations.	Certified within 90 days of a new hire or 90 days from July 1.
	.1.2.2 Provide test reports, analyses, and data to the government.	Weekly status reports provided one day prior to TRG meetings.
	1.2.3 Provide test reports, analyses, and data to the government for the following tests: Phase II tests, Phase III tests	Phase II reports due 2 weeks after test completion. Phase III reports due 2 weeks after individual sites/tests, consolidated report 1 month after last site. Weekly status reports provided one day prior to TRG meetings.
	1.2.4 Development of upper-air MYSQL database	Preliminary database with government provided predefined queries/reports due December 30, 2009.
	1.2.5 Provide weekly status reports.	Weekly-Thursday of same week.
	1.3.1 The contractor will prepare weekly reports for the FPR COTS evaluation. Provide test reports, analyses, and data to the government.	Weekly-Friday of same week. On the agreed to date defined in the MS Project Schedule and/or the Work Task Order.
	1.3.2 Provide test reports, analyses, and data to the government.	On the agreed to date defined in the MS Project Schedule and/or the Work Task

	Order.
1.3.3 Provide test reports, analyses, and data to the government. In addition, the contractor will install a cotton region shelter at the SFSC.	On the agreed to date defined in the MS Project Schedule and/or the Work Task Order. Installation will occur no later than 7 days after receipt of assets.
1.4.1 Maintenance records and PM scheduling.	PM schedules will occur in accordance with technical manuals. Records submitted same day as completed.
1.4.2 Maintenance records and PM scheduling.	PM schedules will occur in accordance with technical manuals. Records submitted same day as completed.
1.4.5 Wind tunnel and RH laboratory evaluation.	Oct 15, 2009.
1.4.6 Complete annual inventory.	In accordance with NWS requirements.
1.4.9 General housekeeping.	Upon completion of task, work area must be cleaned within 1 day.
1.4.10 1. Upper air database should be completed. 2. Complete sensor database.	1. Due 1 December 2009. 2. Due 30 May 2009.
1.4.11 Phone etiquette.	Proper etiquette will be implemented on every call.
CLIN 7A SFSC Operations Travel & ODCs	
2.0 Travel/Trip reports	Received by TM NLT 10 working days after return
CLIN 9 ASOS PI Labor	

	3.1.1 Install ceilometer and expand DAS at Bismarck	August 17,2009
	3.1.2 Install ceilometer and DAS at Aberdeen	Sept. 14, 2009
	3.1.3 Interim ceilometer performance reports	Oct. 15, 2009 Nov. 13, 2009 Jan. 15, 2010 March 15, 2010 May 14, 2010
	3.1.4 Presentation of interim ceilometer performance report	Oct. 29, 2009 Nov. 27, 2009 Jan. 29, 2010 March 29, 2010 May 28, 2010
	3.1.5 Final report and analysis of ceilometer performance	June 15, 2010
	3.1.6 Presentation of final report on ceilometer performance	June 29, 2010
	3.2.1 Install AWPAG at NCAR Marshall Test Facility in Colorado	October 5, 2009
	3.2.2 Interim report on AWPAG transfer function development based on 2009-2010 winter season	Jan. 29, 2010
	3.2.3 Presentation of interim report on AWPAG transfer function development	Feb. 12, 2010
	3.2.4 Final report and analysis of AWPAG transfer function development	May 14, 2010
	3.2.5 Presentation of final report on AWPAG transfer function development	June 2, 2010
	3.3.1 Test Plan for testing hail detector and hail pads in the lab and in the field	August 30, 2009
	3.3.2 Install one prototype hail detector at CoCoRAHS site and one at Sterling for field testing	Sept. 1, 2009
	3.3.3 Testbeds and DAS configured for field test of COTS EPIs sensors at Sterling and Johnstown	July 31, 2009

	3.3.4 Test Plan for evaluation of performance of COTS sensors at Sterling and Johnstown and CoCoRAHS site	July 31, 2009
	3.4.1 Johnstown testbed documentation updated as need after upgrades or modifications	15 working days after completion of upgrade/modification
	3.5.1 Return of ceilometer equipment from Mount Washington Observatory	August 31, 2009
	3.6.1 Return of ceilometer equipment from Fairbank, Alaska	August 31, 2009
	3.7.1 Klett post processing software test begin	December 21, 2009
	3.7.2 Klett Software testing completes	February 10, 2010
	3.7.3 Klett Software final analysis and final report	May 05, 2010
	CLIN 9A ASOS PI Travel & ODCs	
	4.0 Travel/Trip reports	Received by TM NLT 10 working days after return
GFE/GFI:	GFE/GFI is available to support this effort. The Contractor may purchase equipment under the ODC expenses with approval of the Government TM.	
Program Objectives/ Possible Performance Measures:	The Government requires this task order have performance-based measures that align with the Statement of Objectives and Program Goals contained in this solicitation. The contractor is required to provide a list of proposed measures for this task order with goals for level of service and the outcomes for achieving/not achieving those goals.	
Inspection/Acceptance:	Final inspection and acceptance of all work performed, reports generated, and other deliverables will be conducted by the Government TM or other designee.	
Travel:	Travel is required to support this task order. All travel expenses must comply with the Federal Travel Regulations. SAIC travel and training will be billed as ODC expenses under CLIN 7A or 9A depending on the purpose. Prior Government approval is required for all travel, training, and ODCs with the exception of weather observations at Johnstown driven by weather events. The authorizing Government officials for SAIC travel are Jim Fitzgibbon for and Jennifer Dover. When possible, at least two weeks in advance of anticipated travel the	

	Contractor shall notify the authorizing Government official. This person will email an authorization/request for travel to Regina Moore (NDBC) and appropriate SAIC staff. In those cases where the travel is organized around a weather event or an operational emergency, authorization may occur on the same day the travel is expected to occur. Since a large portion of the travel will be short notice type travel, funding for travel will be allocated on not less than a quarterly basis to the appropriate accounts.
Required information and/or submittals to be included in the required Task Management Plan (TMP):	1. Task Management Plan (TMP) a. Work Breakdown Structure (WBS) b. Performance Specifications and Metrics c. Cost, Schedule and Performance Metrics 2. Task Order Cost Proposal must be broken into 2 CLINs (7 & 9) each with a sub-CLIN (7A & 9A) for travel and ODCs. The Cost Proposal should be further broken down into contract year quarters with the base period being the first quarter of contract year 5 and each of the remaining quarters as option periods.

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05 CLIN 7 & CLIN 9
Period of Performance: All Periods (01 Jul 09 - 30 Jun 10)

[redacted]

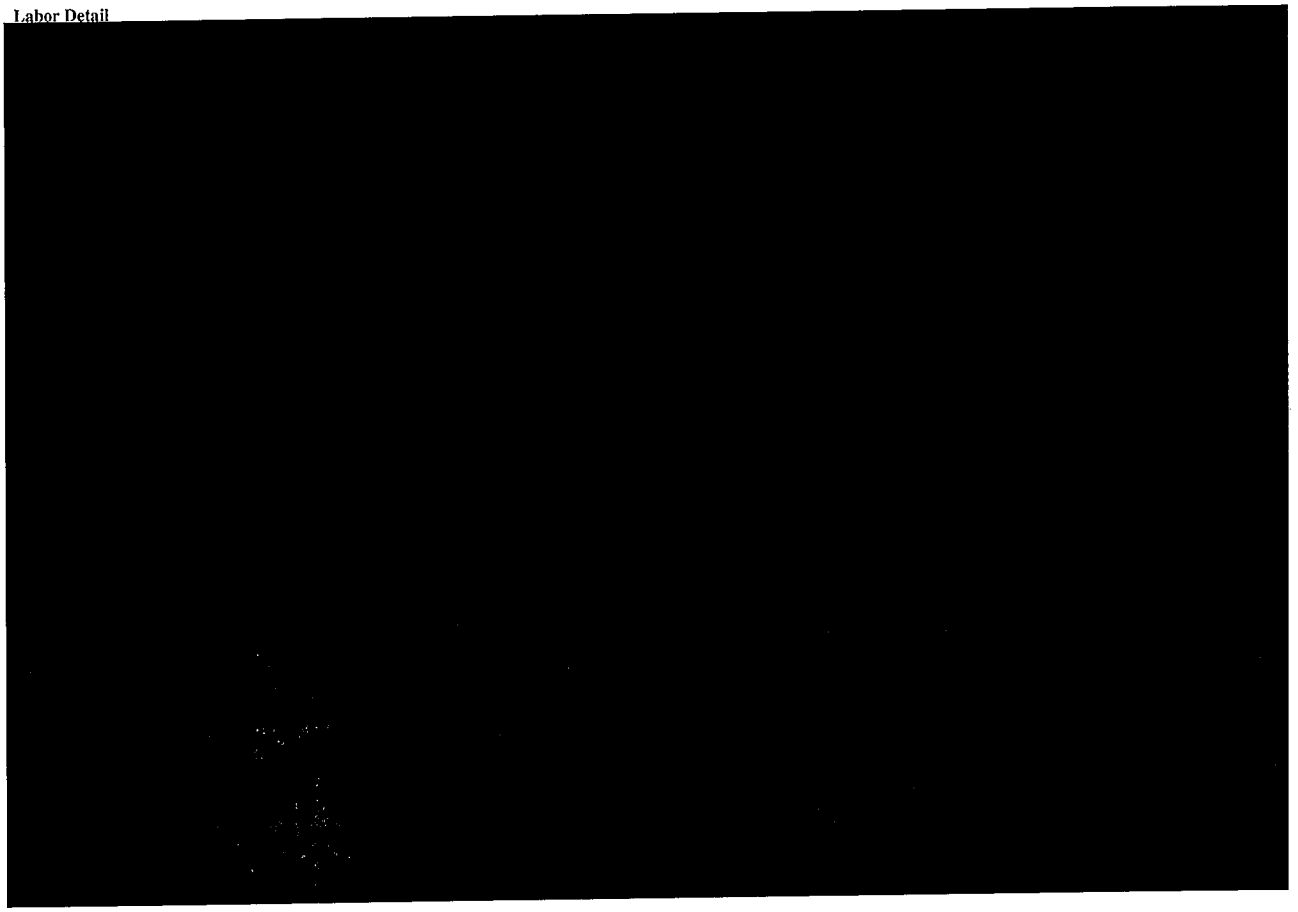
[redacted]

[redacted]

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: All Periods (01 Jul 09 - 30 Jun 10)

FFP CLIN 7

Labor Detail



Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: 01 Jul 09 - 30 Jun 10

Other Direct Costs (ODCs)

CLIN 7

Ref No.:	Item Description	Qty	Unit Measure	Unit Price	Ext. Price
[redacted]					

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: All Periods (01 Jul 09 - 30 Jun 10)

CPFF ODC's CLIN 7

Subtotal

OTHER DIRECT COSTS

[redacted]

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: 01 Jul 09 - 30 Jun 10

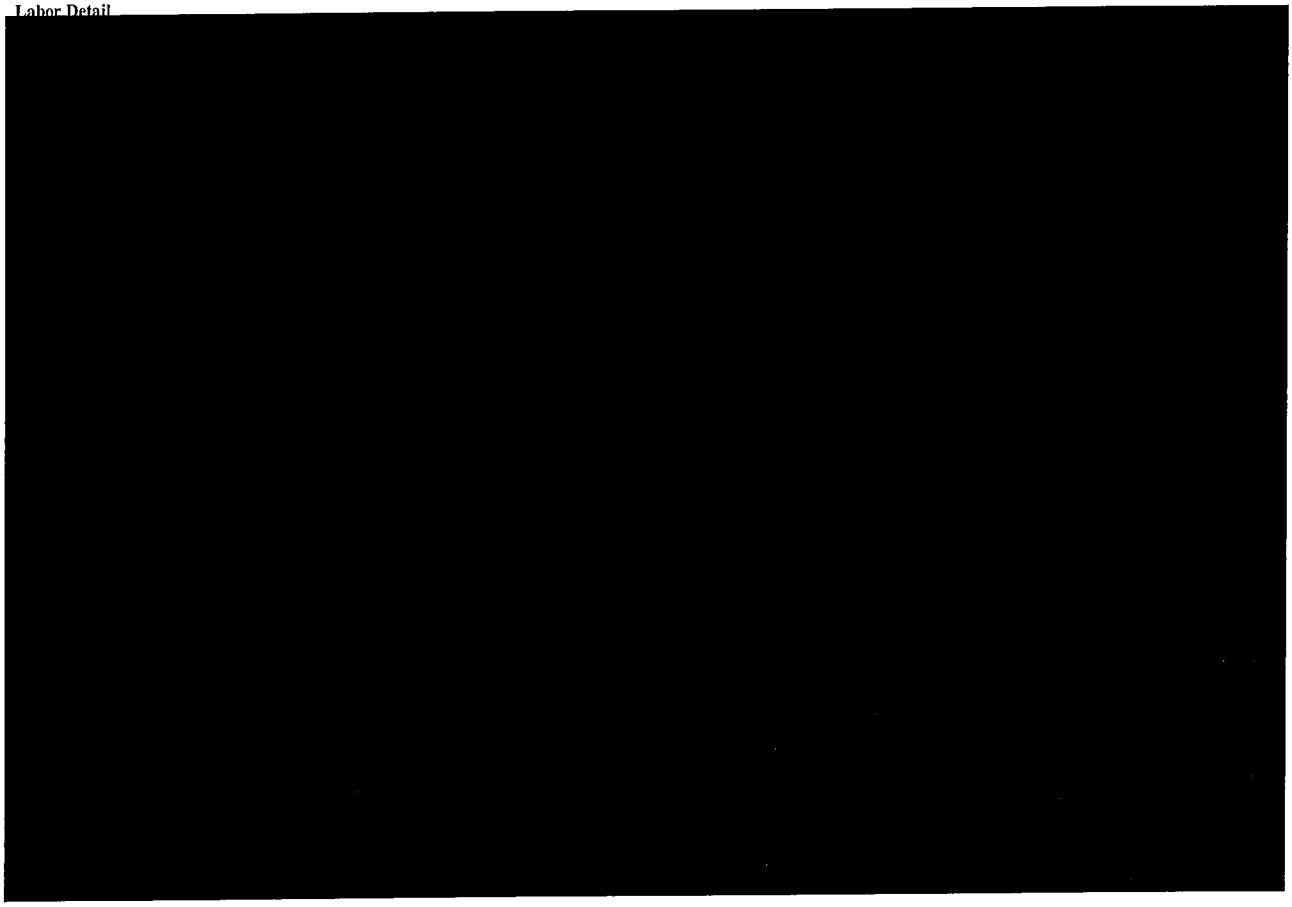
Travel Detail *TRAVEL CLIN 7.1*

[redacted]

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: All Periods (01 Jul 09 - 30 Jun 10)

FFP CLIN 9

Labor Detail



Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: All Periods (01 Jul 09 - 30 Jun 10)

CPFF CLIN 9 Subtotal

OTHER DIRECT COSTS

[redacted]

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: 01 Jul 09 - 30 Jun 10

Other Direct Costs (ODCs)

CLIN 9 ODCs

Contract No.: QA1330-05-CQ-1035 / Task Order No.: Task Order 8 CY05
Offeror: Science Applications International Corporation - TSC (Co 6)
Proposal No.: TO-8 CY05_v3
Proposal Title: Technical Support Service for Sterling Field Support Center - OPS22/OPS52 Contract Year 05
Period of Performance: 01 Jul 09 - 30 Jun 10

[redacted]

Travel Detail ***TRAVEL CLIN 9.1***

[redacted]